



PSTF EXISTING BURN BUILDING STRUCTURAL REHABILITATION

3260 N 40TH ST

PROJECT No.: CP0096

PLAN SET "B"

PROJECT DATA

PROJECT:
MESA FIRE DEPT. BURN BUILDING
3260 N. 40TH STREET MESA, ARIZONA

BUILDING CODES: 2006 IBC W/ C.O.M. AMENDMENTS

USE: FIRE-DEPT. TRAINING

BUILDINGS: BURNING BUILDING - TWO STORY
MAZE BUILDING - SINGLE STORY

BUILDING NOTES

1. THE CONTRACTOR WILL INSPECT THE PREMISES IMMEDIATELY TO OBSERVE EXISTING WORKING CONDITIONS. SHOULD THE CONTRACTOR FIND CONDITIONS, WHICH HE BELIEVES WOULD IMPEDE HIS WORK, THEN SUCH CONDITIONS MUST BE REPORTED TO THE CITY INSPECTOR. FAILURE TO ADVISE BOTH WILL CONSTITUTE NOTICE THAT THE CONTRACTOR IS FULLY SATISFIED WITH THE EXISTING CONDITIONS AND THAT HE INTENDS TO PERFORM HIS OBLIGATION WITH NO ALLOWANCES EITHER IN TIME OR MONETARY COMPENSATION FOR ANY IMPEDIMENTS TO HIS WORK.
2. EACH CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING AND REPLACING THEIR OWN DEFECTIVE WORK AS WELL AS PAYING ALL INCIDENTAL COSTS INCLUDING DAMAGE TO OTHER WORK, FURNISHINGS AND EQUIPMENT.
3. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR ERECTION AND PLACEMENT OF ALL BARRIERS, SIGNAGE, PROTECTED WALKWAYS AND LIGHTING DURING CONSTRUCTION TO MAINTAIN PUBLIC SAFETY. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR ALL CONSTRUCTION METHODS AND MEANS, SITE SAFETY AND DAILY CLEAN-UP AND LEGAL DISPOSAL OF ALL DEBRIS.
4. WHERE EXISTING CONSTRUCTION IS CUT OR OTHERWISE DISTURBED TO PERMIT INSTALLATION OF THE NEW WORK, MATCH AND PATCH EXISTING DISTURBED CONSTRUCTION. USE METHODS AND MATERIALS SIMILAR IN APPEARANCE AND EQUAL IN QUALITY TO AREAS BEING REPAIRED.
5. ALL MATERIALS THAT HAVE BEEN DEMOLISHED SHALL BE REMOVED FROM THE SITE AND DISPOSED OF IN A PROPER MANNER, INCLUDING OBTAINING ANY AND ALL PERMITS REQUIRED FOR THEIR DISPOSAL.
6. THE ENGINEER SHALL NOT HAVE ANY RESPONSIBILITY FOR THE DISCOVERY, PRESENCE, HANDLING, REMOVAL, DISPOSAL OF OR EXPOSURE OF PERSONS TO HAZARDOUS MATERIALS IN ANY WAY AT THE PROJECT SITE, INCLUDING BUT NOT LIMITED TO, POLYCHLORINATED BIPHENYL (PCB) OR OTHER TOXIC SUBSTANCES.
7. THE CONTRACTOR SHALL SUPERVISE AND DIRECT THE WORK USING HIS BEST SKILLS AND ATTENTION. HE SHALL BE SOLELY RESPONSIBLE FOR ALL CONSTRUCTION AND/OR INSTALLATION MEANS, METHODS, TECHNIQUES, SEQUENCES, AND PROCEDURES AND FOR ALL PORTIONS OF THE WORK UNDER THIS CONTRACT.
8. ALL WORK SHALL BE EXECUTED IN A NEAT AND WORKMANLIKE MANNER ACCEPTABLE TO THE OWNER.
9. UNLESS OTHERWISE SPECIFICALLY NOTED, THE CONTRACTOR SHALL PROVIDE AND PAY FOR ALL LABOR, MATERIALS, EQUIPMENT, TOOLS, CONSTRUCTION EQUIPMENT, AND MACHINERY TRANSPORTATION AND OTHER FACILITIES AND SERVICES NECESSARY FOR PROPER EXECUTION AND COMPLETION OF THE WORK.
10. WHEN WORK NOT SPECIFICALLY CALLED OUT IS REQUIRED TO COMPLETE THE PROJECT, IT SHALL BE PROVIDED AND BE OF THE BEST MATERIALS AND WORKMANSHIP.
11. THE CONTRACTOR WARRANTS TO THE OWNER THAT ALL MATERIAL AND EQUIPMENT FURNISHED UNDER THIS CONTRACT WILL BE NEW UNLESS OTHERWISE SPECIFIED AND THAT ALL WORK WILL BE OF GOOD QUALITY, FREE FROM FAULTS AND DEFECTS AND IN CONFORMANCE WITH THE CONSTRUCTION DOCUMENTS. ALL WORK NOT SO CONFORMING TO THESE STANDARDS MAY BE CONSIDERED DEFECTIVE. IT IS UNDERSTOOD THAT NO INFERIOR OR NON-CONFORMING WORK OR MATERIALS WILL BE ACCEPTED WHETHER DISCOVERED AT THE TIME THEY ARE INCORPORATED IN THE WORK OR ANY TIME BEFORE OR AFTER THE FINAL ACCEPTANCE. IF REQUIRED BY THE OWNER, THE CONTRACTOR SHALL FURNISH SATISFACTORY EVIDENCE AS TO THE KIND OF AND QUALITY OF MATERIALS AND WORKMANSHIP.
12. ALL MANUFACTURED ARTICLES, MATERIALS, AND EQUIPMENT SHALL BE APPLIED, INSTALLED, CONNECTED, ERECTED, USED, CLEANED AND CONDITIONED IN ACCORDANCE WITH THE MANUFACTURER'S WRITTEN SPECIFICATIONS OR INSTRUCTIONS UNLESS HEREAFTER SPECIFIED TO THE CONTRARY.
13. ALL WORK SHALL COMPLY WITH THE REQUIREMENTS FOR NON-DISCRIMINATION ON THE BASIS OF DISABILITY BY THE PUBLIC ACCOMMODATIONS AND IN COMMERCIAL FACILITIES AS OUTLINED IN THE FEDERAL REGISTER 28 CFR PART 36 (ORDER NO. 1513-91) DEPARTMENT OF JUSTICE, US OFFICE OF THE ATTORNEY GENERAL, AMERICANS WITH DISABILITIES ACT, PUBLIC LAW 101-336.
14. ALL WORK SHALL COMPLY WITH ALL APPLICABLE CODES, ORDINANCES AND FEDERAL STATE AND LOCAL LAWS. SIGNS REQUIRE SEPARATE DRAWINGS, APPROVALS AND PERMITS AS PER THE CITY OF MESA ORDINANCE.
15. ALL SITE CLEANUP, MUST BE COMPLETED PRIOR TO SUBSTANTIAL COMPLETION.
16. CITY OF MESA DEVELOPMENT SERVICES DEPARTMENT INSPECTIONS SHALL BE NOTIFIED 48 HOURS PRIOR TO ANY START OF CONSTRUCTION OF WORK.
17. ANY ELECTRICAL WORK SHALL BE PERFORMED BY A QUALIFIED ELECTRICIAN AS REQUIRED BY THE LATEST N.E.C. CODE.
18. DRAWINGS ARE NOT TO BE SCALED. ALL WORK, LINES AND LEVELS SHALL BE LAID OUT BY DIMENSIONS. DIMENSIONS TO TAKE PRECEDENCE OVER SCALE ON CONSTRUCTION DOCUMENTS. ANY DEVIATIONS SHALL BE BROUGHT TO THE ATTENTION OF THE ENGINEER IMMEDIATELY. ANY DEVIATIONS SHALL BE DEEMED CORRECTED BY CONTRACTOR BEFORE BEGINNING HIS PORTION OF THE WORK.
19. ALL ANGLES ARE 90 DEGREES OR 45 DEGREES UNLESS OTHERWISE NOTED.
20. ALL DIMENSIONS ARE TO FACE OF CONCRETE UNLESS OTHERWISE NOTED.

GENERAL NOTES

(REVISED 08-15-12)

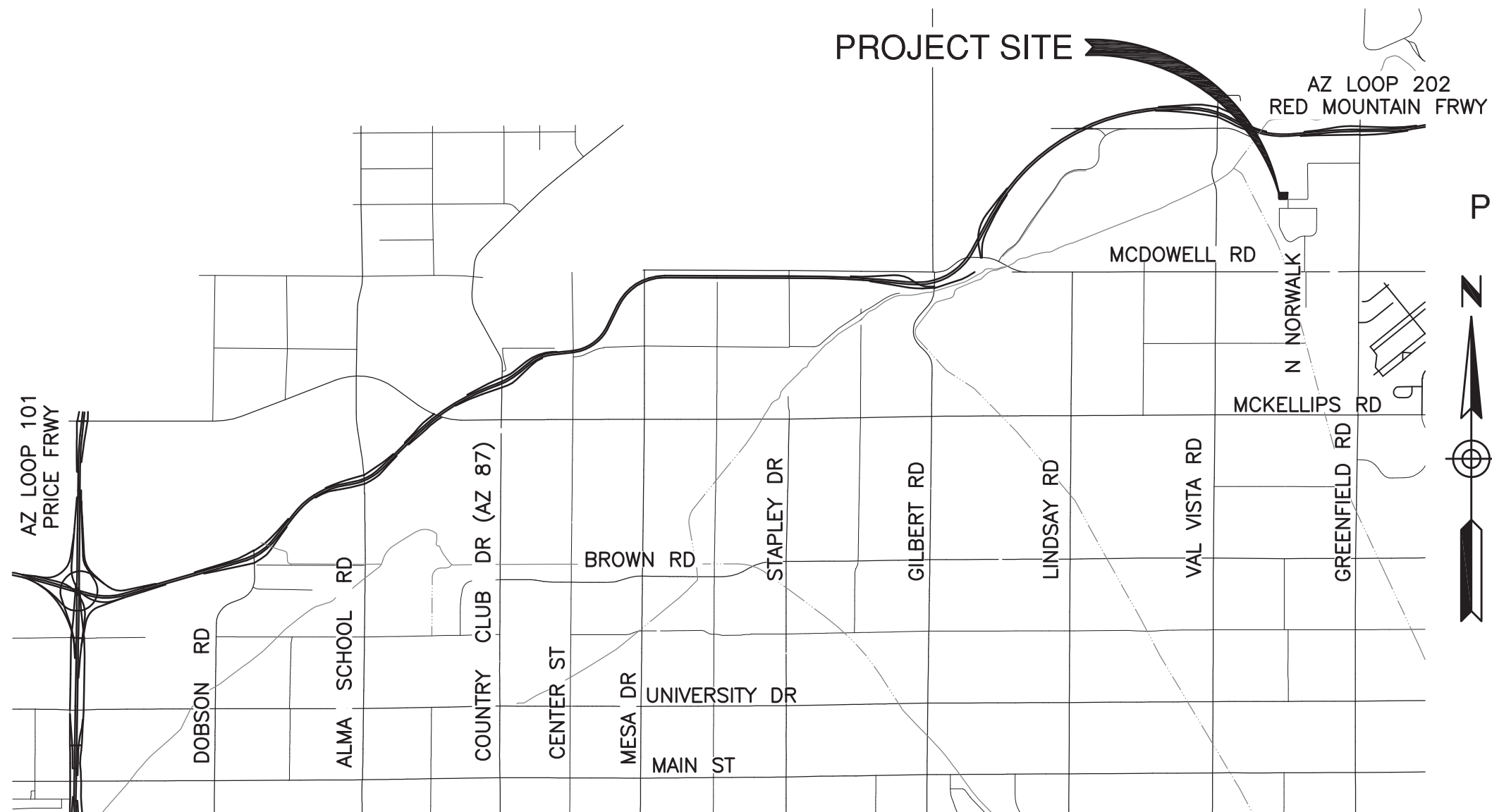
1. ALL WORK AND MATERIALS SHALL CONFORM TO CURRENT UNIFORM STANDARD SPECIFICATIONS AND DETAILS FOR PUBLIC WORKS CONSTRUCTION AS PUBLISHED BY THE MARICOPA ASSOCIATION OF GOVERNMENTS AND AS AMENDED BY THE CITY OF MESA. ALL WORK AND MATERIALS NOT IN CONFORMANCE WITH THESE AMENDED SPECIFICATIONS AND DETAILS ARE SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
2. THE INFORMATION SHOWN ON DRAWINGS CONCERNING THE TYPE AND LOCATION OF EXISTING UNDERGROUND UTILITIES IS APPROXIMATE AND HAS NOT BEEN INDEPENDENTLY VERIFIED BY THE ENGINEER OR THE ENGINEER'S AGENT. THE CONTRACTOR SHALL DETERMINE THE EXACT LOCATION OF ALL EXISTING UTILITIES BEFORE COMMENCING WORK, AND AGREES TO BE FULLY RESPONSIBLE FOR ANY AND ALL DAMAGES WHICH MAY OCCUR BY THE CONTRACTOR'S FAILURE TO EXACTLY LOCATE AND PRESERVE ANY AND ALL UNDERGROUND AND OVERHEAD UTILITIES.

A. CALL 602-263-1100 OR 811 FOR BLUE STAKE SERVICES.
B. CALL SALT RIVER POWER FOR ELECTRIC SERVICE OR CONSTRUCTION SCHEDULING AT 602-236-8888.
3. CONTRACTOR TO OBTAIN ANY PERMITS REQUIRED UNLESS OTHERWISE INDICATED, AND COORDINATE ALL IRRIGATION DRY-UPS, RELOCATIONS, AND REMOVALS BY OTHERS.
4. CONTRACTOR SHALL POTHOLE EXISTING UTILITIES AHEAD OF CONSTRUCTION TO ALLOW FOR ANY UNNECESSARY ADJUSTMENTS IN GRADE LINE AND TO VERIFY PIPE MATERIALS FOR ORDERING THE APPROPRIATE TRANSITION AND TIE-IN FITTINGS THAT MAY BE REQUIRED.
5. THE CONTRACTOR IS RESPONSIBLE TO REMOVE ALL ABANDONED UTILITIES THAT INTERFERE WITH PROPOSED IMPROVEMENTS. THE CITY OF MESA UTILITIES DEPARTMENT LOCATING SECTION WILL ASSIST THE CONTRACTOR AS NEEDED, IN DETERMINING IF THE UTILITY (GAS, WATER, AND WASTEWATER ONLY) IS ABANDONED BY CALLING 480-644-4500.
6. THE CONTRACTOR IS ADVISED THAT A DUST CONTROL PERMIT AND A DUST CONTROL PLAN MAY BE REQUIRED BY THE MARICOPA COUNTY AIR QUALITY DEPARTMENT. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO OBTAIN THIS PERMIT, IF NECESSARY, AND COMPLY WITH ITS REQUIREMENTS. PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PROVIDE A COPY OF THE DUST CONTROL PERMIT AND DUST CONTROL PLAN TO THE CITY FOR REVIEW.
7. INSPECTIONS SHALL BE PROVIDED BY THE CITY OF MESA. THE CONTRACTOR SHALL NOTIFY THE CITY INSPECTION DEPARTMENT AT LEAST 48 HOURS IN ADVANCE OF ANY CONSTRUCTION.
8. THE JOB SITE SHALL BE CLEANED OF ANY DEBRIS OR SPOIL RESULTING FROM THIS PROJECT AT THE COMPLETION OF CONSTRUCTION.
9. ALL EQUIPMENT AND MATERIALS NOT SHOWN OR SPECIFIED ON THE PLANS OR SPECIFICATIONS, BUT REQUIRED TO COMPLETE THIS PROJECT, SHALL BE SUPPLIED BY THE CONTRACTOR AS PART OF THIS CONTRACT WORK (NO ADDITIONAL COST TO THE CITY).
10. WHEREVER PAVEMENT REPLACEMENT PER MESA STD DETAIL M-19.04.1 AND M-19.04.2 OR MAG STD DETAIL 200 IS REFERRED TO WITHIN THESE PLANS, BACKFILLING SHALL BE PER THE CITY OF MESA STREET TRENCH BACKFILLING AND PAVEMENT REPLACEMENT POLICY STATEMENT, REVISED SEPTEMBER 29, 1999.
11. FOR PURPOSES OF PAVEMENT PER MAG STD DETAIL 200 OR MESA STD DETAIL M-19.4.1 AND M-19.04.2, INTERSECTIONS ARE DEFINED BY THE CURB RETURNS IN ALL DIRECTIONS.
12. ANY SURVEY MARKERS DISTURBED OR DAMAGED BY THE CONTRACTOR SHALL BE REPLACED IN KIND BY A REGISTERED LAND SURVEYOR AT NO ADDITIONAL COST TO THE CITY.
13. THE CONTRACTOR IS ADVISED THAT DAMAGE TO ANY PUBLIC SERVICES OR SYSTEMS AS A RESULT OF THIS PROJECT SHALL BE REPAIRED BY THE CONTRACTOR AND INSPECTED BY THE CITY INSPECTOR. DEPENDING ON DAMAGES, ALL REPAIRS SHALL BE DONE WITHIN 24 HOURS. THE CONTRACTOR IS ADVISED THAT ANY COSTS RELATED TO REPAIR OR REPLACEMENT OF DAMAGED PUBLIC SERVICES OR SYSTEMS AS A RESULT OF CONTRACTOR'S NEGLIGENCE SHALL BE BORNE BY THE CONTRACTOR.

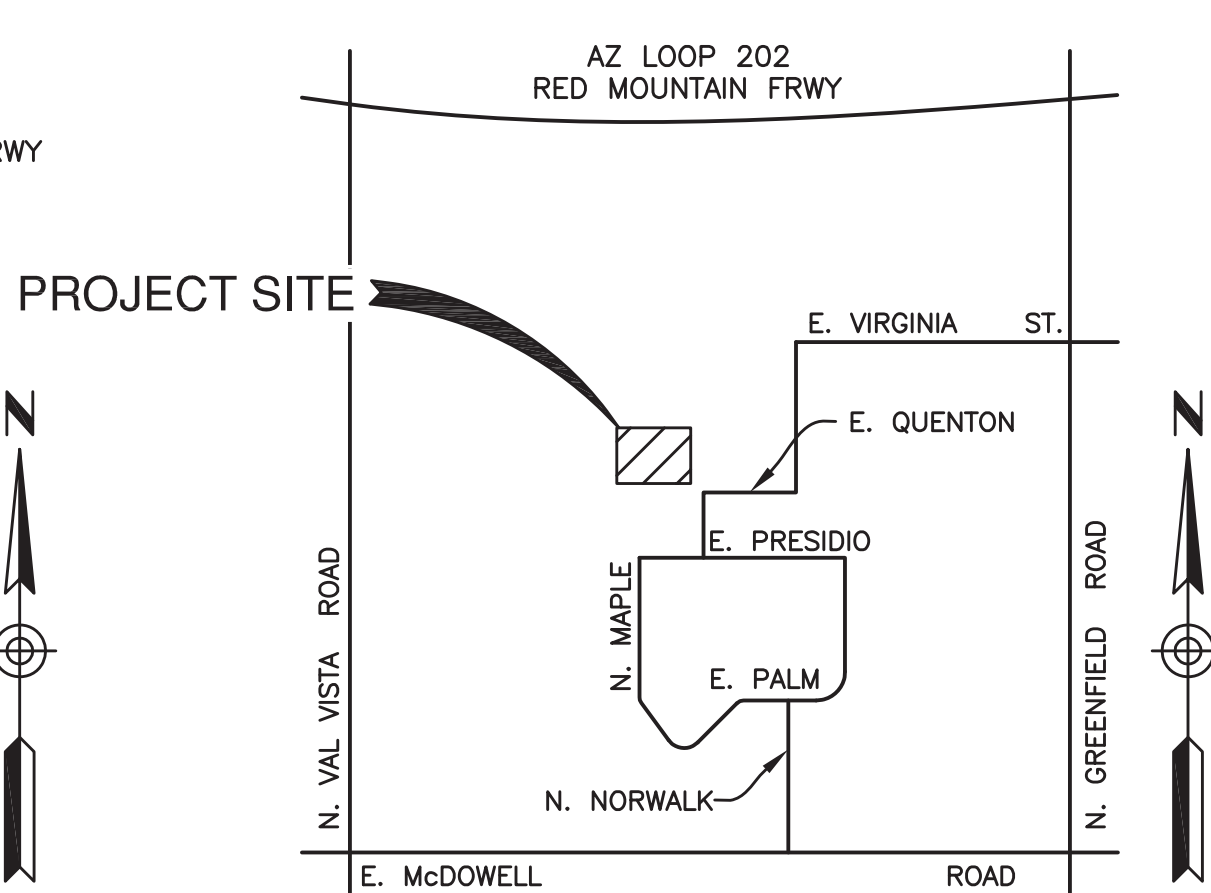
SHEET INDEX

SHEET	DESCRIPTION
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3	S2 FLOOR & CEILING REPAIR PLANS AND DETAILS
4	S3 WALL ELEVATIONS & DETAILS
5	S4 INTERIOR WALL ELEVATIONS
6	S5 WALL ELEVATIONS
7	S6 WALL ELEVATIONS & DETAILS
8	S7 INSULATION PANEL SUPPORT SYSTEM & SAFETY RAILING PLANS

VICINITY MAP



LOCATION MAP



APPROVED COPY

CITY OF MESA: ENGINEERING DEPARTMENT

PLAN APPROVAL DOES NOT CONSTITUTE AN APPROVAL OR PERMIT FOR VIOLATION OF ANY PROVISIONS OF THE MAG UNIFORM STANDARD SPECIFICATIONS & DETAILS AS AMENDED BY THE CITY OF MESA.

BY: *[Signature]* DATE: 9/29/2015



DRAWN BY: ESORENSEN
ENGINEER: S. SAFI
APPROVED BY: S. GANSTROM

ACTIVITY: 1875
PROJ. NO.: CP0096-1

CITY OF MESA
ENGINEERING DEPARTMENT

PSTF EXISTING BURN BUILDING
3260 NORTH 40TH STREET

COVER SHEET

DRAWING

T1

SHEET
1 OF 8

CATALOG NUMBER:
A-176934

DATE: 10/21/15 I:\CP0096 PUBLIC SAFETY TRAINING FACILITY BURN ROOM\CP0096-1 PSTF EX BURN BLDG STRUCTURAL REPAIRS\DESIGN\CADD FILES\PLANS\CP0096-1 02 S1 NOTES.DWG

SCOPE OF STRUCTURAL WORK (GENERAL)

- THE SCOPE OF WORK FOR THIS PROJECT IS AS FOLLOWS:
 - POWER WASH OF WALLS, CEILINGS AND FLOORS HAVE OCCURRED. ADDITIONAL POWER WASHING/PREP CLEANING SHALL BE REQUIRED TO ENSURE THE ~~EPOXY CRACK REPAIR AND PATCH REPAIR OCCUR~~ ACCORDING TO INSTALLATION REQUIREMENTS.
 - ~~EPOXY INJECTION TO WALLS, CEILING, AND ELEVATED FLOOR PANEL CRACKS.~~
 - CONCRETE PATCH REPAIRING TO DAMAGED WALLS, ELEVATED FLOORS AND CEILINGS.
 - ~~INSTALL INSULATION SYSTEM INSTALLATION AT 1ST AND 2ND FLOORS OF BURN BUILDING ROOMS AND AT MAZE ROOM.~~
 - REPLACEMENT OF SEALANT IN VERTICAL JOINTS WHERE REQUIRED ON DETAILS.

REPAIR GENERAL NOTES

- ALL PARTIES INVOLVED IN THE REPAIR WORK SHALL VISIT THE SITE, BECOME FAMILIAR WITH AND VERIFY THE EXISTING CONDITIONS WITH THOSE SHOWN ON THE DRAWINGS.
- VERIFY ALL DIMENSIONS AND CONDITIONS PRIOR TO STARTING WORK. NOTIFY THE ENGINEER OF ANY DISCREPANCIES OR INCONSISTENCIES.
- UTILITY RELOCATION AND ALTERATIONS MAY BE REQUIRED. UTILITIES ARE NOT SHOWN ON THE PLANS AND THE CONTRACTOR SHALL IDENTIFY ALL CONFLICTS. THE CONTRACTOR SHALL COORDINATE ALTERATIONS TO EXISTING MECHANICAL, PLUMBING, AND ELECTRICAL UTILITIES. THE CONTRACTOR SHALL RELOCATE EXISTING UTILITIES INCLUDING DUCT WORK, SPRINKLERS, WATER AND GAS LINES, AND ELECTRICAL CONDUITS AS REQUIRED. THIS RELOCATION WORK SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THE APPROPRIATE CODE AS REQUIRED BY THE CITY OF MESA. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS AS REQUIRED FOR UTILITY RELOCATION, THIS WORK SHALL BE PERFORMED AT NO ADDITIONAL COST TO THE CITY OF MESA. COST SHALL BE INCLUDED IN BASE BID.
- CONTRACTOR SHALL REPAIR AND/OR REPLACE ANY DAMAGE TO EXISTING CEILINGS, ROOFING, LIGHTS, FIXTURES OR OTHER MATERIALS CAUSED BY THE WORK TO MATCH EXISTING CONDITIONS. ALL PAINTING AND SURFACE TREATMENTS (INTERIOR AND EXTERIOR) SHALL ALSO MATCH EXISTING CONDITIONS.
- ALL NECESSARY TEMPORARY BRACING, SHORING, GUYING OR OTHER MEANS SHALL BE PROVIDED TO AVOID EXCESSIVE STRESSES AND TO HOLD STRUCTURAL ELEMENTS IN PLACE DURING CONSTRUCTION. SHORING IS REQUIRED WHERE SHOWN AND MINIMUM SHORING LOADS ARE PROVIDED. DETAILS SHOW CONCEPTUAL SHORING ONLY AND OTHER SHORING CONFIGURATIONS ARE POTENTIAL. ALL SHORING SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
- THE CONTRACTOR SHALL REMOVE ALL ELECTRICAL EQUIPMENT INCLUDING CONDUIT, WIRING, LIGHTING FIXTURES AND SWITCHES FROM THE BURN BUILDING AND MAZE ROOM AS REQUIRED. THE CONTRACTOR SHALL PROVIDE FIRE CAULK SEALS IN ALL PENETRATIONS IN WALLS. THE CONTRACTOR SHALL PROVIDE CONTINUATION OF EXISTING CIRCUITS WHERE REQUIRED TO CONTINUE FEEDS TO EQUIPMENT ON OUTSIDE OF BUILDING TO REMAIN.
- ANY ENGINEERING DESIGN PROVIDED BY OTHERS AND SUBMITTED FOR REVIEW SHALL BEAR THE SEAL AND SIGNATURE OF AN ENGINEER REGISTERED IN ARIZONA.

STRUCTURAL NOTES

(APPLY UNLESS NOTED OTHERWISE ON DRAWINGS)

CODE

- COMPLY WITH 2006 INTERNATIONAL BUILDING CODE WITH CITY OF MESA AMENDMENTS.

CONCRETE REPAIRS

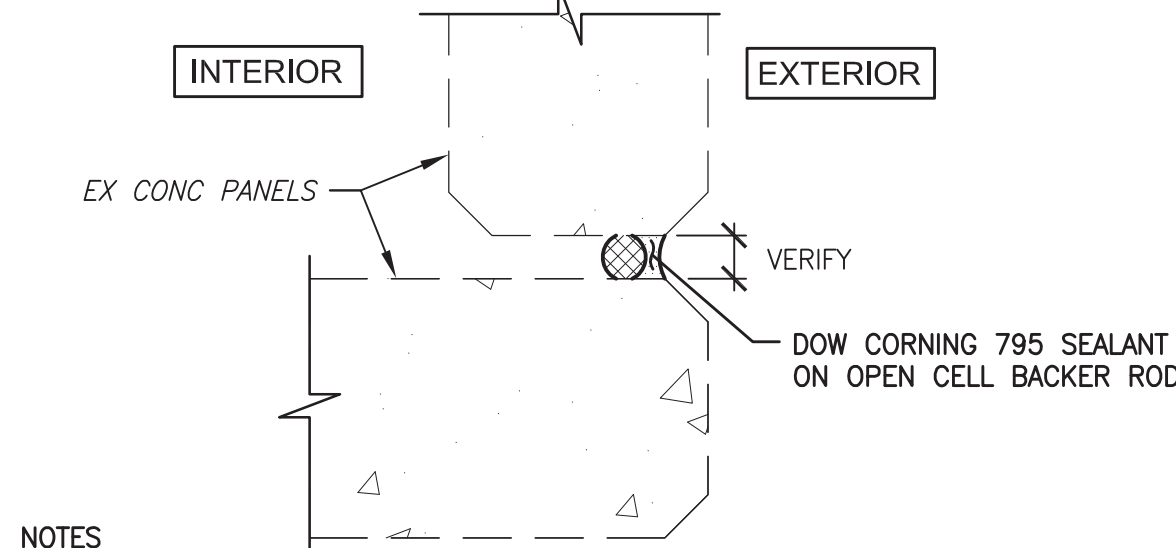
- SEE TECHNICAL SPECIFICATIONS BOOK FOR THIS PROJECT, DATED MAY 2015.
- CONCRETE WALL & SLAB REPAIR NOTES:
 - SHORE EXISTING CONCRETE LINTELS AND FLOOR SLABS AS SHOWN ON DETAILS PRIOR TO DEMO.
 - CHIP OUT EXISTING CONCRETE BEYOND EXISTING CORROSION & CRACKS PER SPEC. SECTION 03111.
 - REVIEW WITH STRUCTURAL ENGINEER.
 - SANDBLAST AND PREP SURFACE IN REPAIR AREA PER SPEC. SECTION 03111.
 - INSTALL NEW REINFORCING AND/OR REPAIR EXISTING REINFORCING PER DTL. 10/S1.
 - DRILL & EPOXY STAINLESS STEEL TIES WHERE REQUIRED PER REPAIR DETAILS.
 - APPLY REBAR COATING TO EXISTING AND/OR NEW REINFORCING STEEL PER SPEC. SECTION 03222.
 - SATURATE SURFACE DRY (SSD) EXISTING CONCRETE SURFACE PER SPEC. SECTION 03111.
 - REPLACE REMOVED CONCRETE WITH REPAIR PATCHING MATERIAL PER SPEC. SECTION 03360.
 - FINISH AND CURE REPAIR AREA PER SPEC. SECTION 03444.
 - SHORING TO REMAIN IN PLACE FOR 7 DAYS AFTER REPAIR PATCHING MATERIAL HAS BEEN PLACED.

REINFORCING

- ASTM A615, GRADE 60, DEFORMED BARS, EXCEPT #2 BARS. CRSI AND ACI MANUALS APPLY.
 - FIELD BENT AND/OR WELDED BARS: ASTM A706
- CLEAR CONCRETE COVERAGE'S PER DETAILS.
- LAP SPLICES IN CONCRETE 36 BAR DIAMETERS.
- SECURELY TIE ALL REINFORCING EMBEDDED ITEMS IN POSITION BEFORE PLACING CONCRETE.
- PLACE REINFORCING PER ACI 318-05 AND CRSI STANDARDS.
- MECHANICAL SPLICE NEW REBAR INTO EXISTING PER DETAIL 5/S1.

STRUCTURAL STEEL

- AISC AND AWS CODES AND HANDBOOKS APPLY.
- PLATES, BARS AND ANGLES: ASTM A36, F_y = 36 KSI MINIMUM.
- STAINLESS STEEL RODS: ASTM A242
- BOLTS: ASTM A307
- WELDING RODS: E-70 LOW HYDROGEN. "JET" WELDING RODS (E7024) SHALL NOT BE USED FOR ANY STRUCTURAL WELDING. COMPLY WITH AMERICAN WELDING SOCIETY CODES AND STANDARDS. ALL WELDING SHALL BE DONE BY CERTIFIED WELDERS.
- STEEL SURFACES TO BE WELDED SHALL BE THOROUGHLY CLEANED OF ALL FOREIGN MATTER INCLUDING PAINT FOR AT LEAST 2 INCHES FROM THE ROOT OF THE WELD.



NOTES

- CLEAN ALL JOINTS OF FOREIGN MATTER AND CONTAMINANTS DOWN TO BEAR CONCRETE.
- USE STANDARD COLOR SEALANT CLOSEST TO EXISTING PAINT COLOR.
- SEALANT TO BE INSTALLED OVER BACKER ROD AT A 2:1 WIDTH TO DEPTH RATIO EXCEPT, AT JOINTS WIDER THAN 1" THE DEPTH SHOULD BE HELD TO 3/8" TO 1/2" DEEP MIN.
- BACKER ROD TO BE DENVER FOAM, AN OPEN CELL, ROUND POLYURETHANE FOAM, AS MANUFACTURED BY BACKER ROD MFG., INC. OR EQUAL. RODS TO BE 25% LARGER THAN JOINT WIDTH MINIMUM.
- SEE SPEC. SECTION 7900 FOR SEALANT AND BACKER ROD.

16 CONCRETE PANEL JOINT

NTS

SPECIAL INSPECTION

SPECIAL INSPECTION IS REQUIRED FOR ALL REPAIR WORK. CALL STRUCTURAL ENGINEER FOR INSPECTION; PHONE NUMBER (602) 285-1720. PROVIDE 48 HOURS NOTICE.

SPECIAL INSPECTION IS TO BE PROVIDED IN ADDITION TO THE INSPECTIONS CONDUCTED BY THE DEPARTMENT OF DEVELOPMENT & SUSTAINABILITY AND SHALL NOT BE CONSTRUED TO RELIEVE THE OWNER OR HIS AUTHORIZED AGENT FROM REQUESTING THE PERIODIC AND CALLED INSPECTIONS REQUIRED BY SECTION 109 OF THE INTERNATIONAL BUILDING CODE. THE SPECIAL INSPECTOR SHALL BE APPROVED BY THE CITY BUILDING OFFICIAL PRIOR TO STARTING WORK.

SPECIAL INSPECTION IS REQUIRED FOR THE FOLLOWING WORK:
(PER IBC SECTION 1704)

CONCRETE:

DURING THE TAKING OF TEST SPECIMENS AND PLACING OF REINFORCED CONCRETE AND PNEUMATICALLY PLACED CONCRETE.

REINFORCING STEEL:

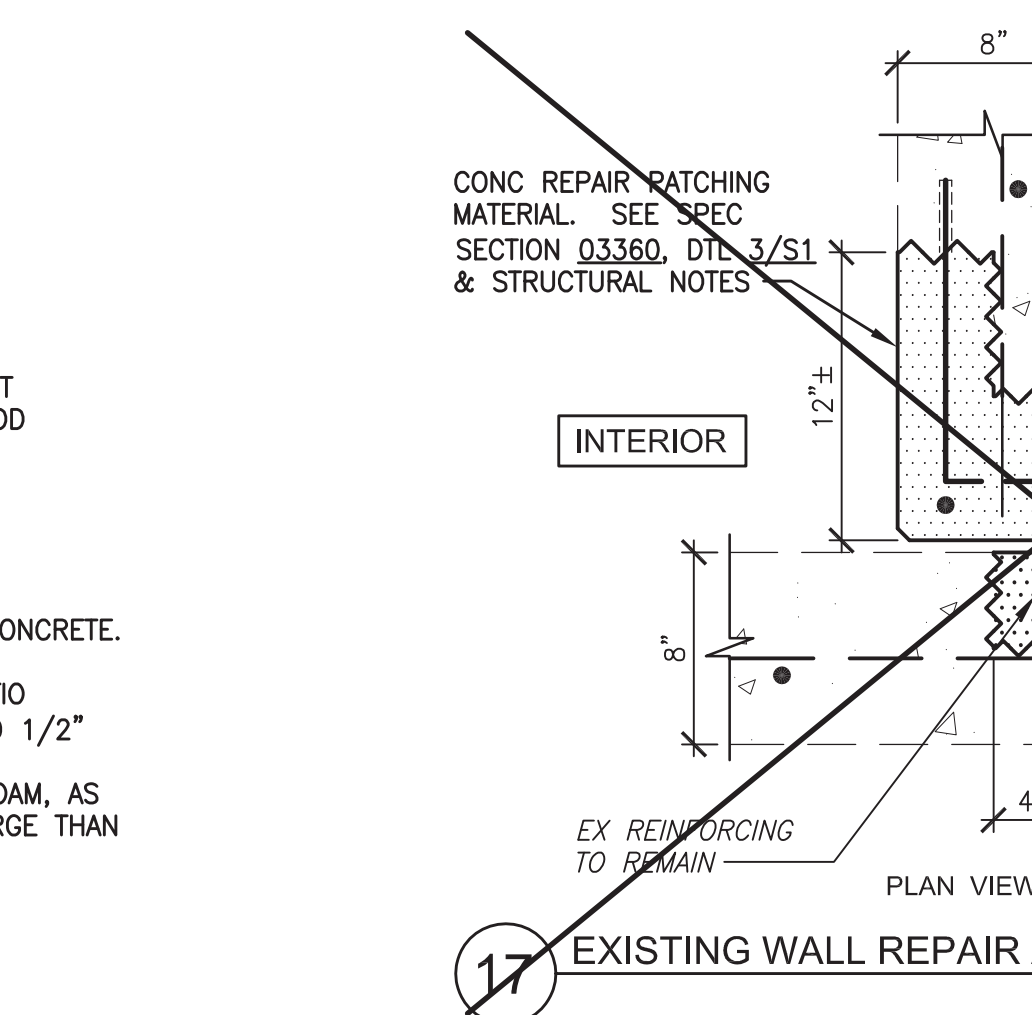
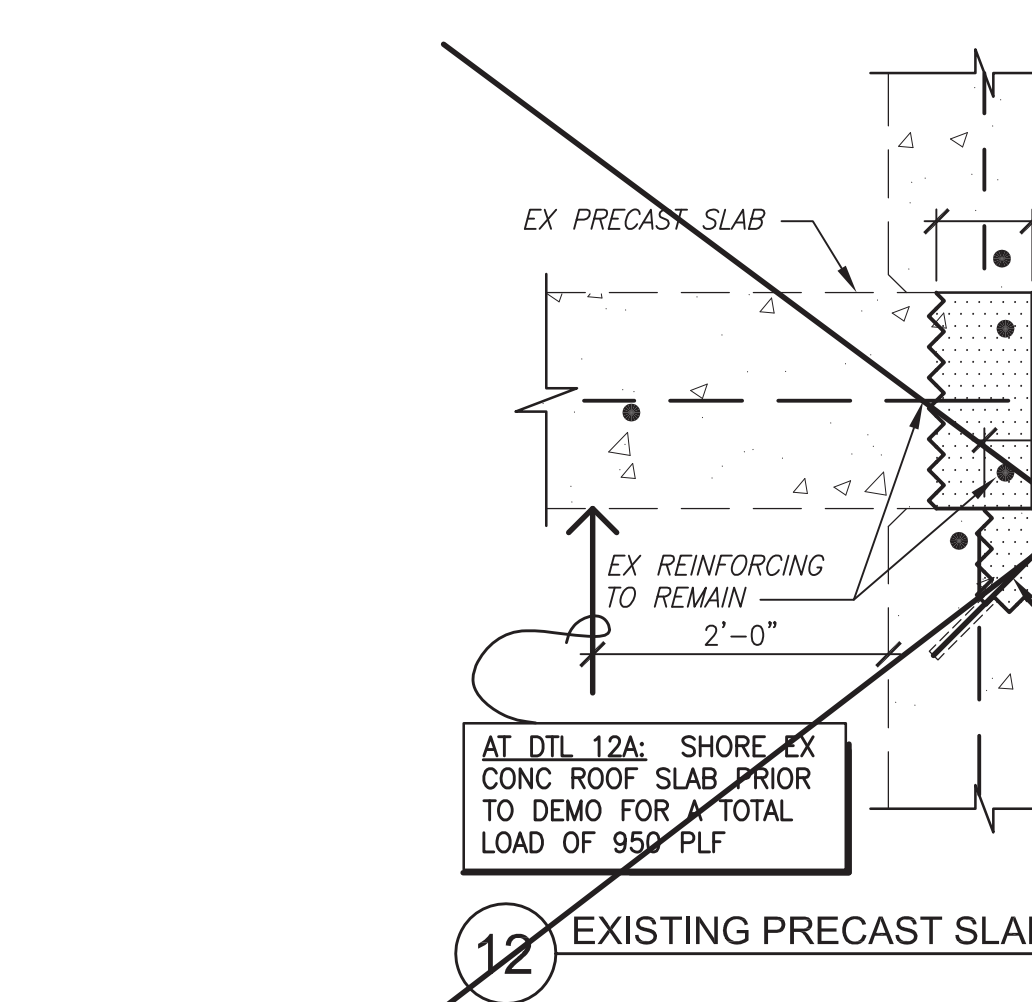
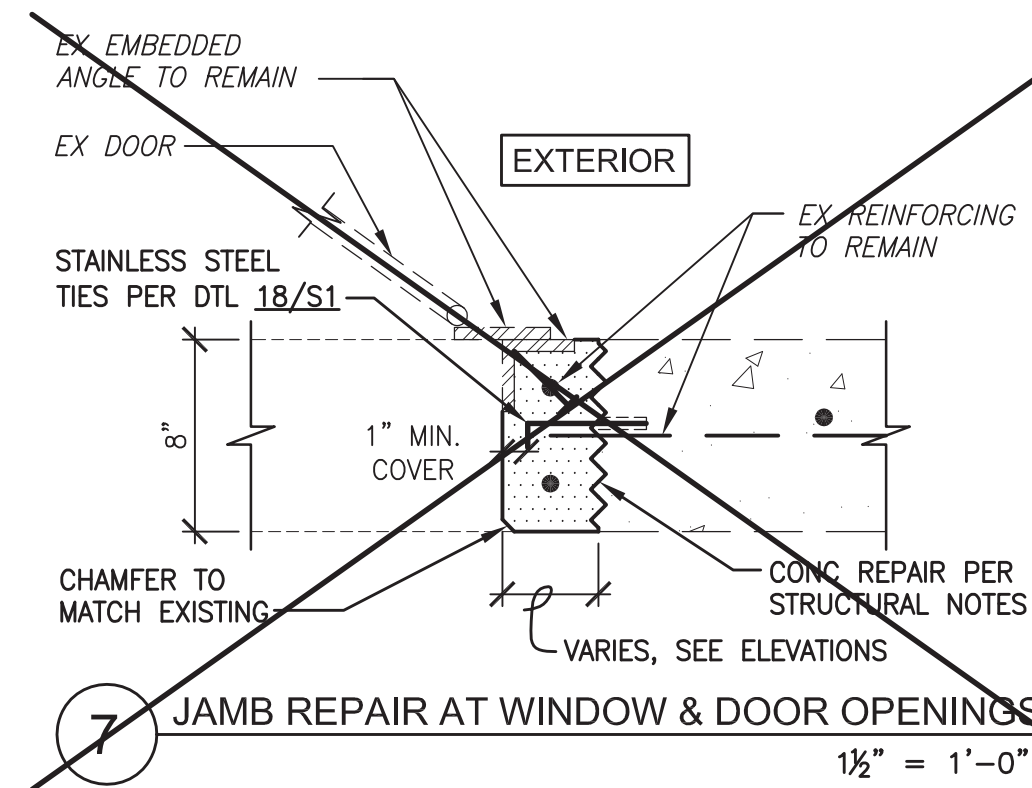
DURING PLACING OF REINFORCING STEEL FOR ALL CONCRETE REQUIRED TO HAVE SPECIAL INSPECTION. THIS INSPECTION MAY BE DONE ON A PERIODIC BASIS IN ACCORDANCE WITH IBC TABLE 1704.4

EPOXY GROUTED ANCHORS:

DURING INSTALLATION OF EPOXY GROUTED ANCHORS.

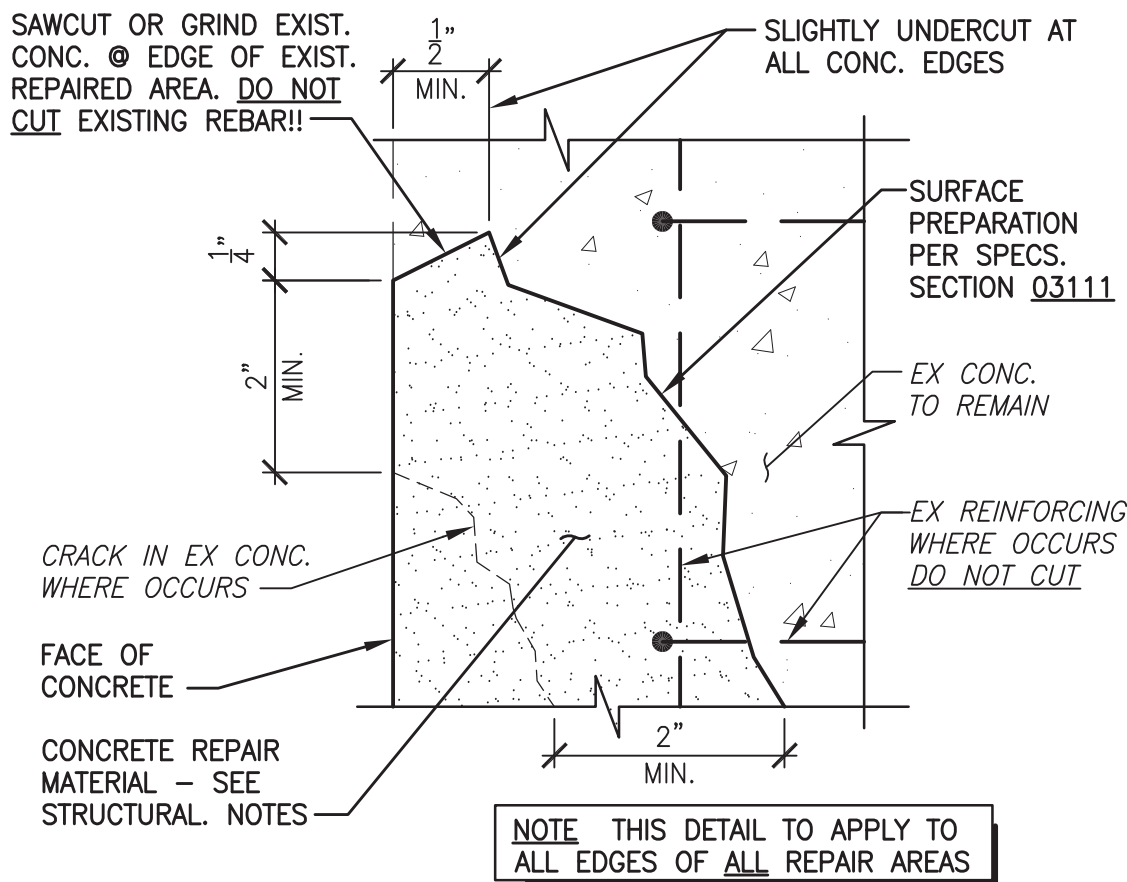
CONCRETE REPAIR REQUIRED INSPECTIONS:

- AFTER CHIPPING PRIOR TO SANDBLASTING.
- AFTER SANDBLASTING PRIOR TO REBAR COATING.
- AFTER REBAR COATING PRIOR TO REPAIR MATERIAL PLACEMENT.
- DURING BOND COAT APPLICATION PRIOR TO AND DURING REPAIR MATERIAL PLACEMENT.
- DURING REPAIR MATERIAL MIXING, PLACEMENT AND CURING.
- DURING ALL EPOXY APPLICATIONS INCLUDING EPOXY INJECTION, BONDING AGENT, ETC.



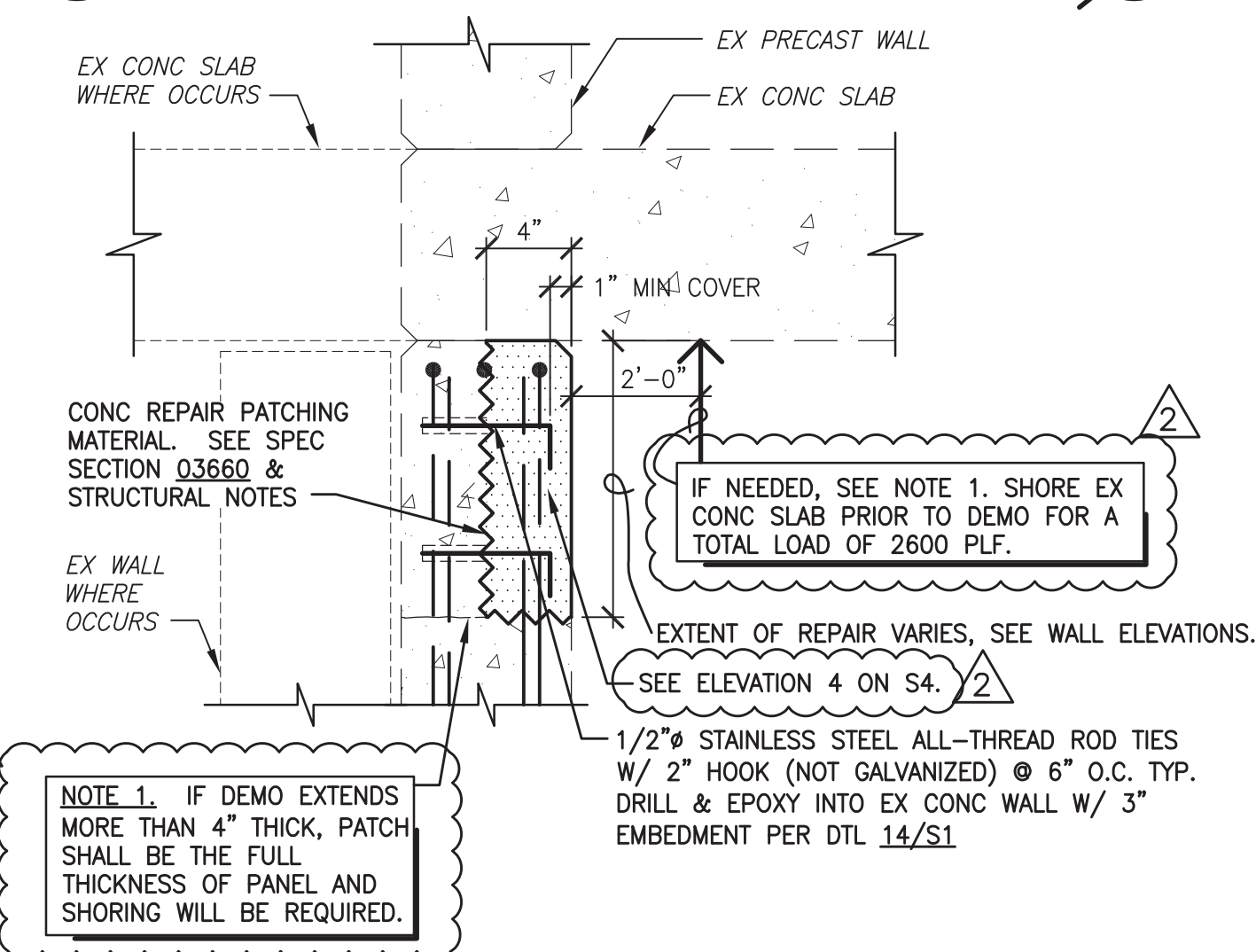
17 EXISTING WALL REPAIR AT CORNER

1 1/2" = 1'-0"



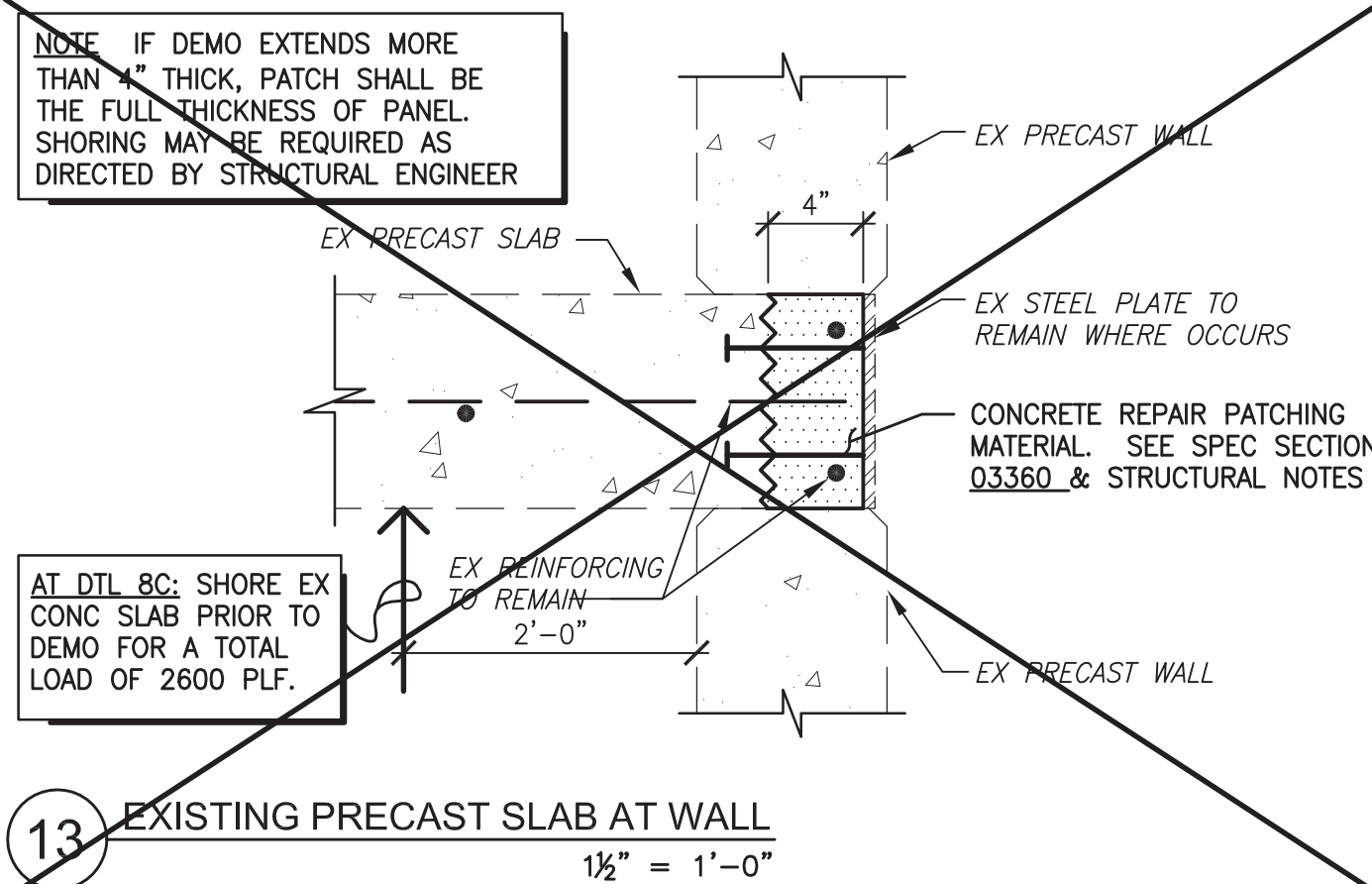
3 UNDERCUT TO EDGE FOR REPAIR AREA

NTS



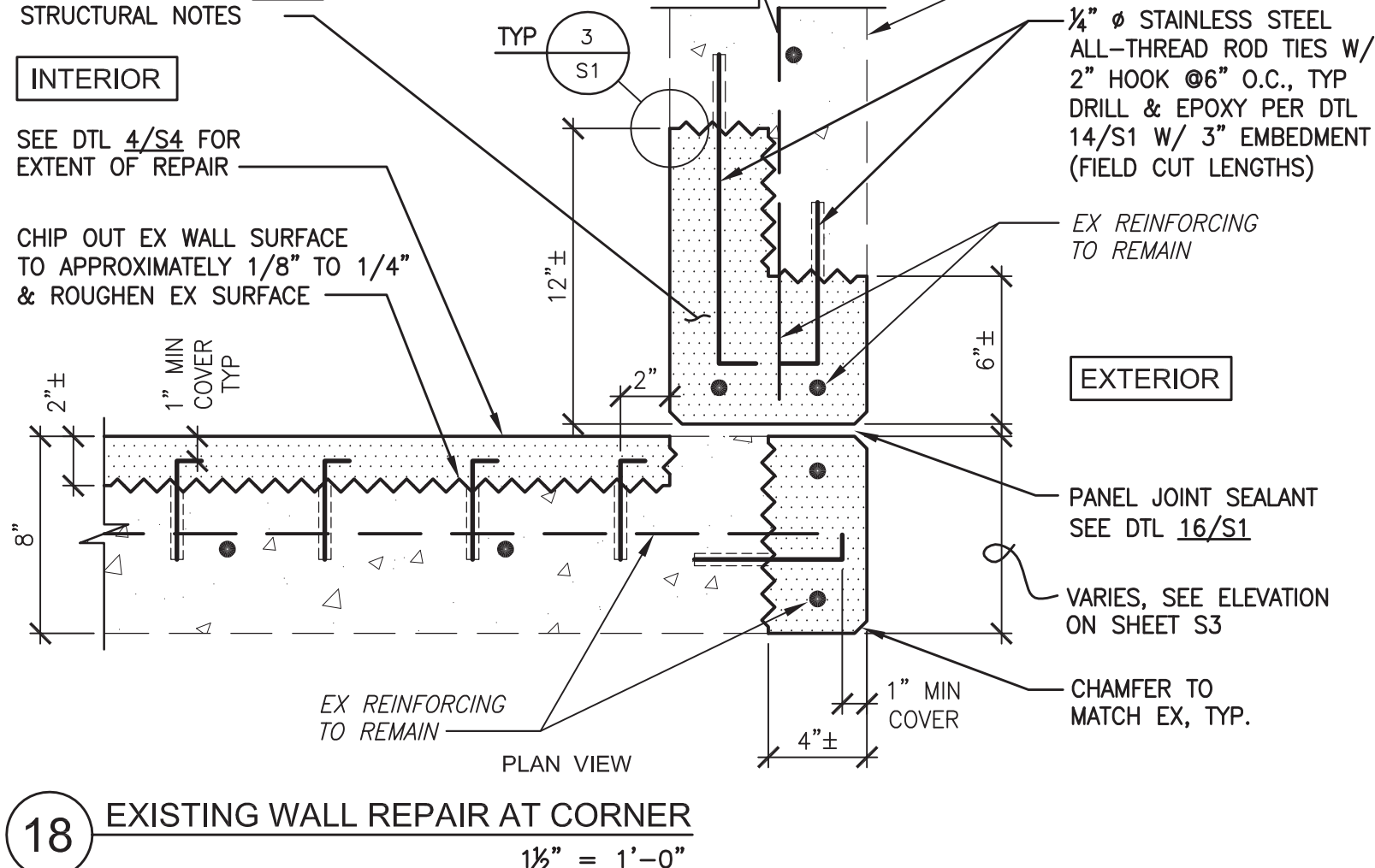
8 CONCRETE PATCH REPAIRS

1 1/2" = 1'-0"



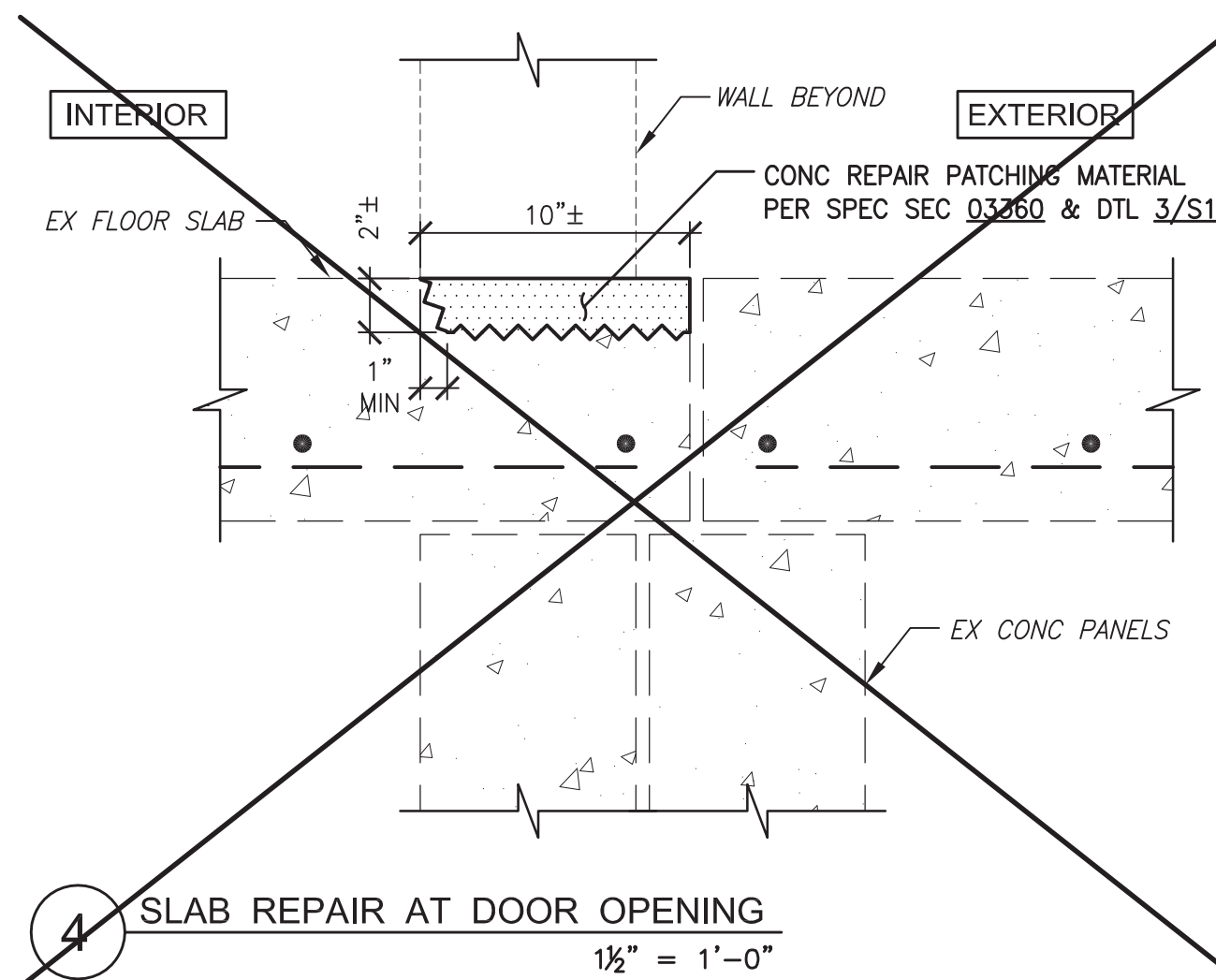
13 EXISTING PRECAST SLAB AT WALL

1 1/2" = 1'-0"



18 EXISTING WALL REPAIR AT CORNER

1 1/2" = 1'-0"



4 SLAB REPAIR AT DOOR OPENING

1 1/2" = 1'-0"

REBAR SPlicing REQUIREMENTS:

- CORROSION DAMAGED REINFORCING BARS MAY REQUIRE REPLACEMENT. THE EXISTING DAMAGED BAR SHALL BE MECHANICALLY SPLICED TO NEW BARS WHEN CROSS-SECTIONAL AREA HAS BEEN DECREASED BY MORE THAN 15%. THE EQUIVALENT DIAMETERS IN THE FOLLOWING TABLE REPRESENT THE EXISTING BAR SIZE AFTER SANDBLASTING.

EXISTING BAR SIZE	DIAMETER (INCHES)	EQUIVALENT DIAMETER REDUCED BY 15%
2	0.25	0.23
3	0.375	0.35
4	0.50	0.46
5	0.625	0.58
6	0.75	0.69

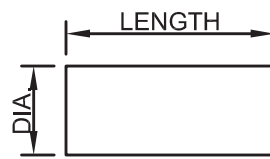
- WHEREVER A CORRODED DIAMETER IS LESS THAN THE ABOVE CHART INDICATES THE EXISTING BAR SHALL BE CUT OFF BEYOND THE AREA OF CORROSION. A NEW REINFORCING BAR SHALL BE SPLICED TO THE EXISTING PER DTL 5/S1. THE SIZE, SHAPE AND CONFIGURATION OF THE NEW REINFORCING BAR SHALL MATCH THE EXISTING AS ORIGINALLY CONSTRUCTED.

10 REDUCED DIAMETER BAR SPlicing

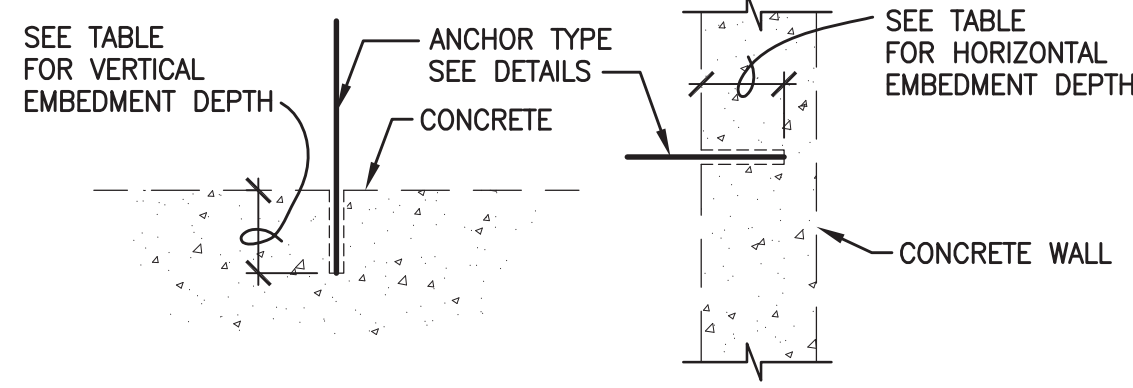
NO SCALE

BPI BAR SPLICER OR APPROVED EQUAL

REBAR SIZE	THREAD SIZE	WEIGHT(LBS)	LENGTH (IN)	DIAMETER (IN)
4	1/2 - 13 UNC	0.22	1 3/4	7/8
5	5-8 - 11 UNC	0.30	2	1
6	3/4 - 10 UNC	0.35	2 1/8	1 1/8



5 LAP MECHANICAL SPLICE FOR BARS SMALLER THAN #6



ANCHOR DIAMETER	VERTICAL EMBEDMENT DEPTH	HORIZONTAL EMBEDMENT DEPTH
1/2" - 5/8"	5"	5"
3/4" - 7/8"	7 1/2"	6 3/4"
1"	8 1/2"	-

ADHESIVE ANCHOR INSTALLATION PROCEDURE

- DRILL HOLE:**
SEE DETAILS FOR ANCHOR TYPE (I.E., REBAR OR ALL-THREAD ROD) AND ANCHOR DIAMETER. DRILL HOLE IN EXISTING CONCRETE WITH A ROTARY HAMMER AND DRILL BIT SIZE 1/8" LARGER THAN ANCHOR DIAMETER. EMBEDMENT DEPTH SHALL BE AS SHOWN IN TABLE ABOVE UNLESS NOTED OTHERWISE.
- CLEAN HOLE:**
REMOVED DUST FROM HOLE WITH OIL-FREE COMPRESSED AIR FOR A MINIMUM OF 4 SECONDS. CLEAN HOLE WITH NYLON BRUSH FOR A MINIMUM OF 4 CYCLES. REMOVE DUST AGAIN FROM THE HOLE WITH OIL-FREE COMPRESSED AIR. USE ONLY BRUSHES SUPPLIED BY SIMPSON (PART #ETB) FOR SPECIFIC ANCHOR DIAMETER.
- ADHESIVE:**
SIMPSON SET-XP ANCHORING ADHESIVE (ICC ESR 2508). ANCHOR INSTALLATION PER MANUFACTURER'S RECOMMENDATIONS. NO SUBSTITUTIONS ARE ALLOWED.
- TEMPERATURE REQUIREMENTS:**
TEMPERATURE MUST BE BETWEEN 50° F AND 110° F AT THE TIME OF INSTALLATION. ADHESIVE TEMPERATURE MUST BE BETWEEN 41° F AND 95° F AT THE TIME OF INSTALLATION.
- PREPARE ANCHOR:**
CLEAN, DRY AND WIPE ANCHOR FREE OF ALL WATER, DIRT, OIL AND GREASE, ETC.
- SET ANCHOR:**
FILL HOLE 1/2 TO 2/3 FULL WITH ADHESIVE STARTING AT THE BOTTOM AND WITHDRAWING THE NOZZLE AS HOLE FILLS UP. INSERT ANCHOR AND TURN DURING INSTALLATION TO INSURE COMPLETE EMBEDMENT. FOR HORIZONTAL AND OVERHEAD APPLICATIONS, INSTALL SIMPSON STRONG-TIE ARC ADHESIVE RETAINING CAP BEFORE FILLING HOLE WITH ADHESIVE. SUPPORT ANCHORS FOR OVERHEAD CONDITIONS TO KEEP THEM FROM SLIDING DOWNWARD.
- SET OR CURE TIME:**
DO NOT DISPLACE OR MOVE ANCHOR IN ANY WAY AFTER ANCHOR IS SET. ALLOW ADHESIVE TO CURE FOR 24 HOURS MINIMUM BEFORE TIGHTENING NUTS ON ANCHORS IN CONCRETE. NUTS SHALL BE TIGHTENED AT TEMPERATURES BETWEEN 70° F AND 110° F.
- MAXIMUM TIGHTENING TORQUE FOR THREADED ANCHORS:**
1/2" DIAMETER = 40 FOOT-POUNDS; 5/8" DIAMETER = 90 FOOT-POUNDS
3/4" DIAMETER = 130 FOOT-POUNDS; 7/8" DIAMETER = 200 FOOT-POUNDS
1" DIAMETER = 300 FOOT-POUNDS
- SPECIAL INSPECTION:**
ADHESIVE ANCHOR INSTALLATIONS REQUIRE SPECIAL INSPECTION IN ACCORDANCE WITH THE CODE. THE SPECIAL INSPECTION SHALL RECORD THE DRILL-BIT COMPLIANCE WITH ANSI B212.15-1994; HOLE DEPTH AND CLEANLINESS; PRODUCT DESCRIPTION, INCLUDING PRODUCT NAME; ROD DIAMETER AND LENGTH; ADHESIVE EXPIRATION DATE; AND VERIFICATION OF ANCHOR INSTALLATION PER PUBLISHED MANUFACTURER'S INSTRUCTIONS.

14 ADHESIVE ANCHOR INSTALLATION IN CONCRETE

NTS

2 ADDENDUM NO. 2 - SHORING SEE DETAIL 8.



DRAWN BY: ESORENSEN
ENGINEER: S SAFI
APPROVED BY: S GANSTROM

ACTIVITY: 1675
PROJ. NO.: CP0096-1

CITY OF MESA
ENGINEERING DEPARTMENT

PSTF EXISTING BURN BUILDING
3260 NORTH 40TH STREET

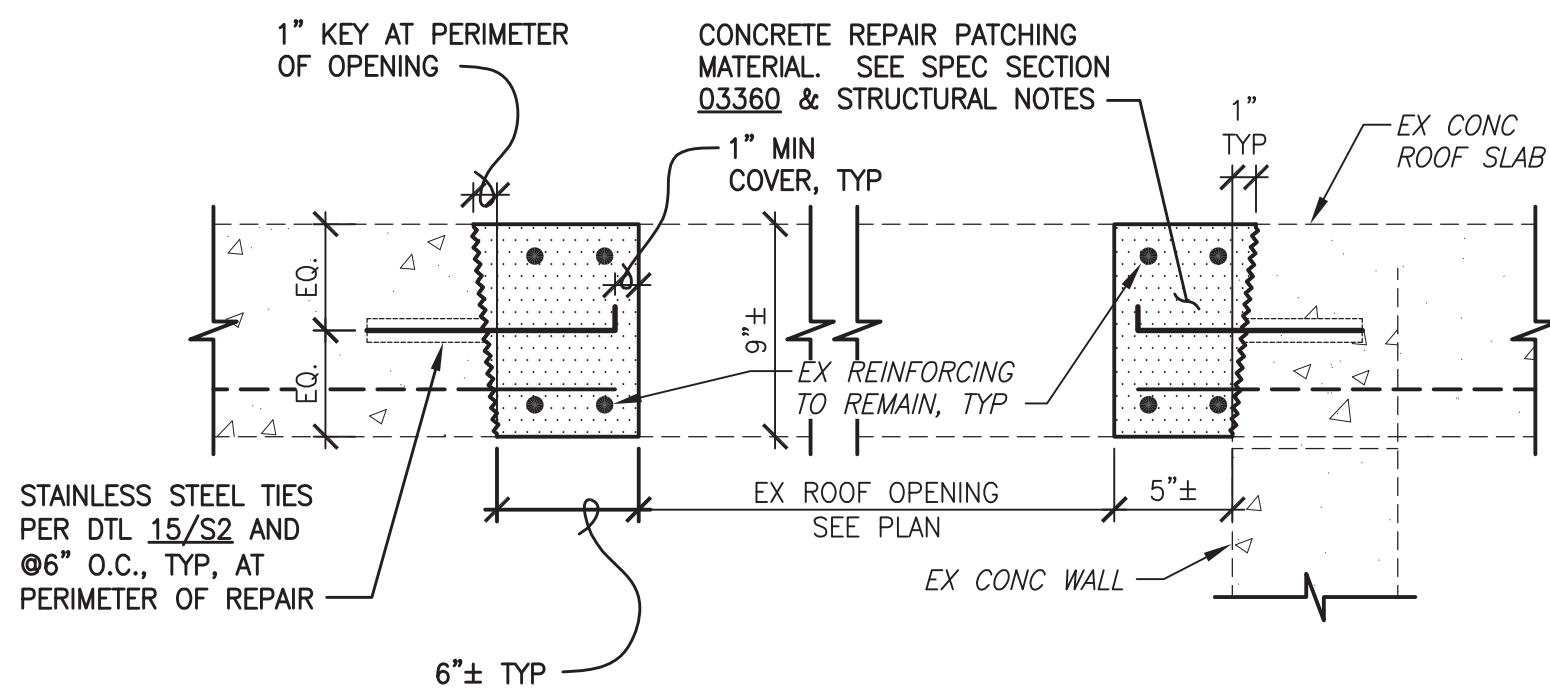
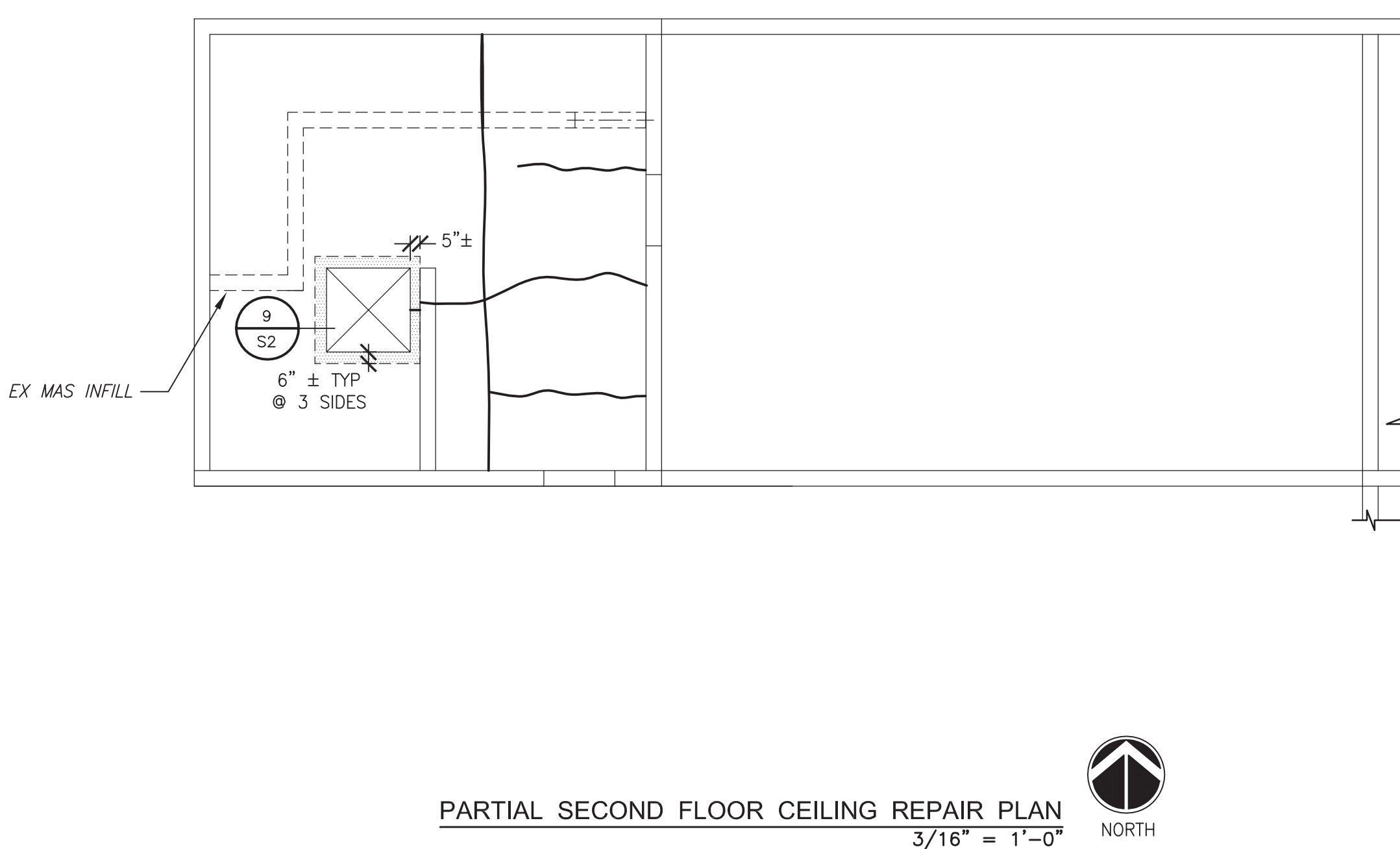
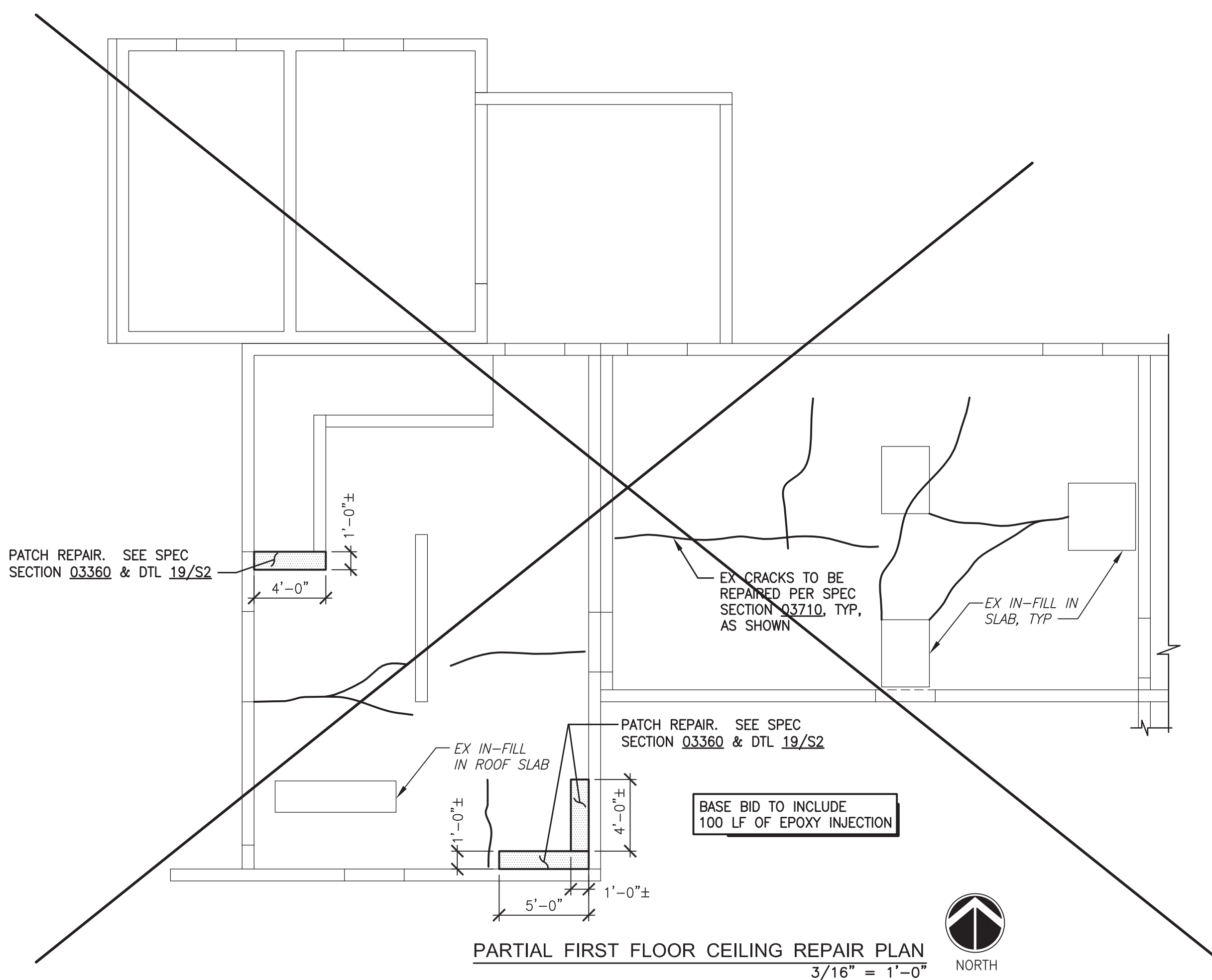
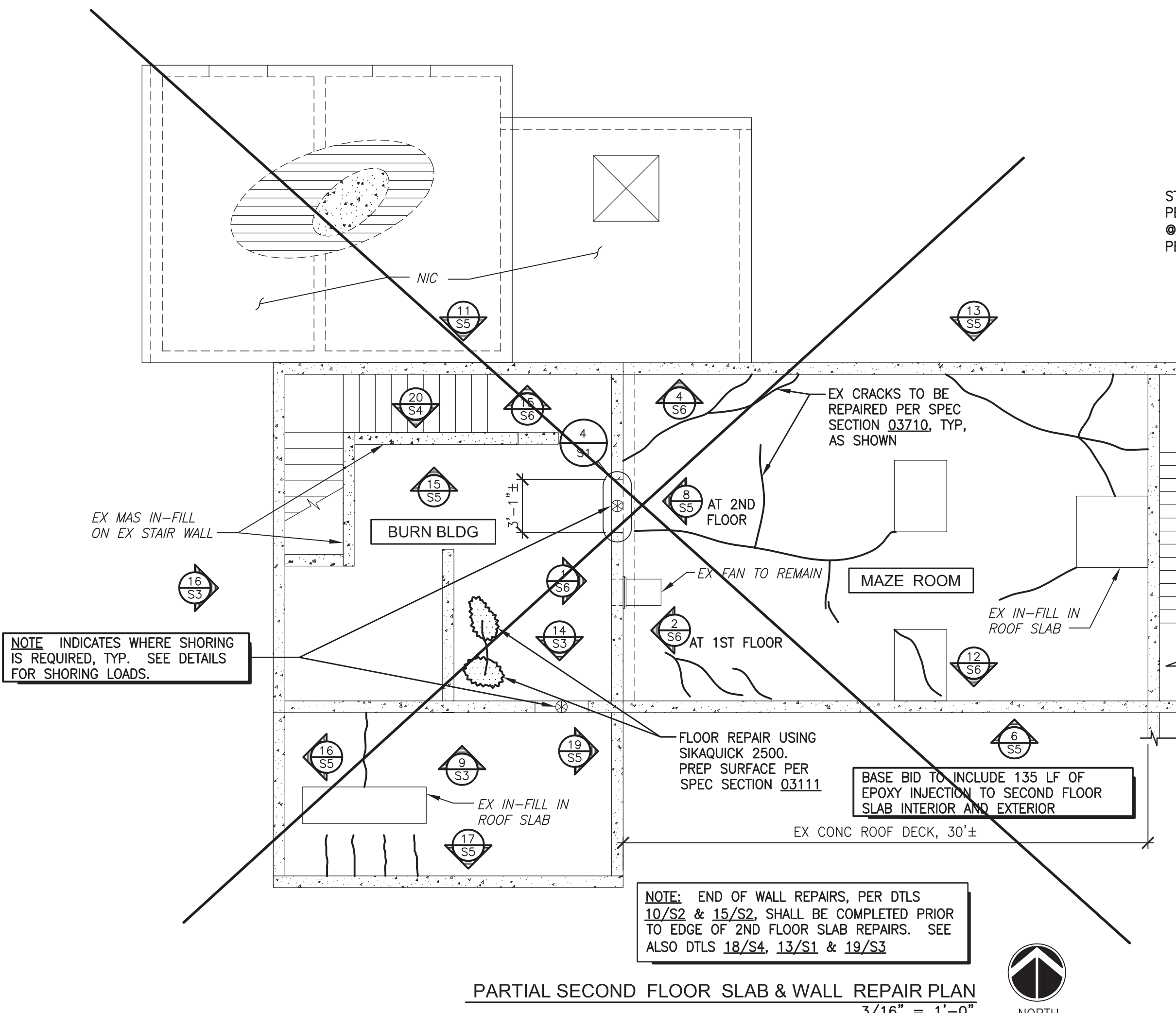
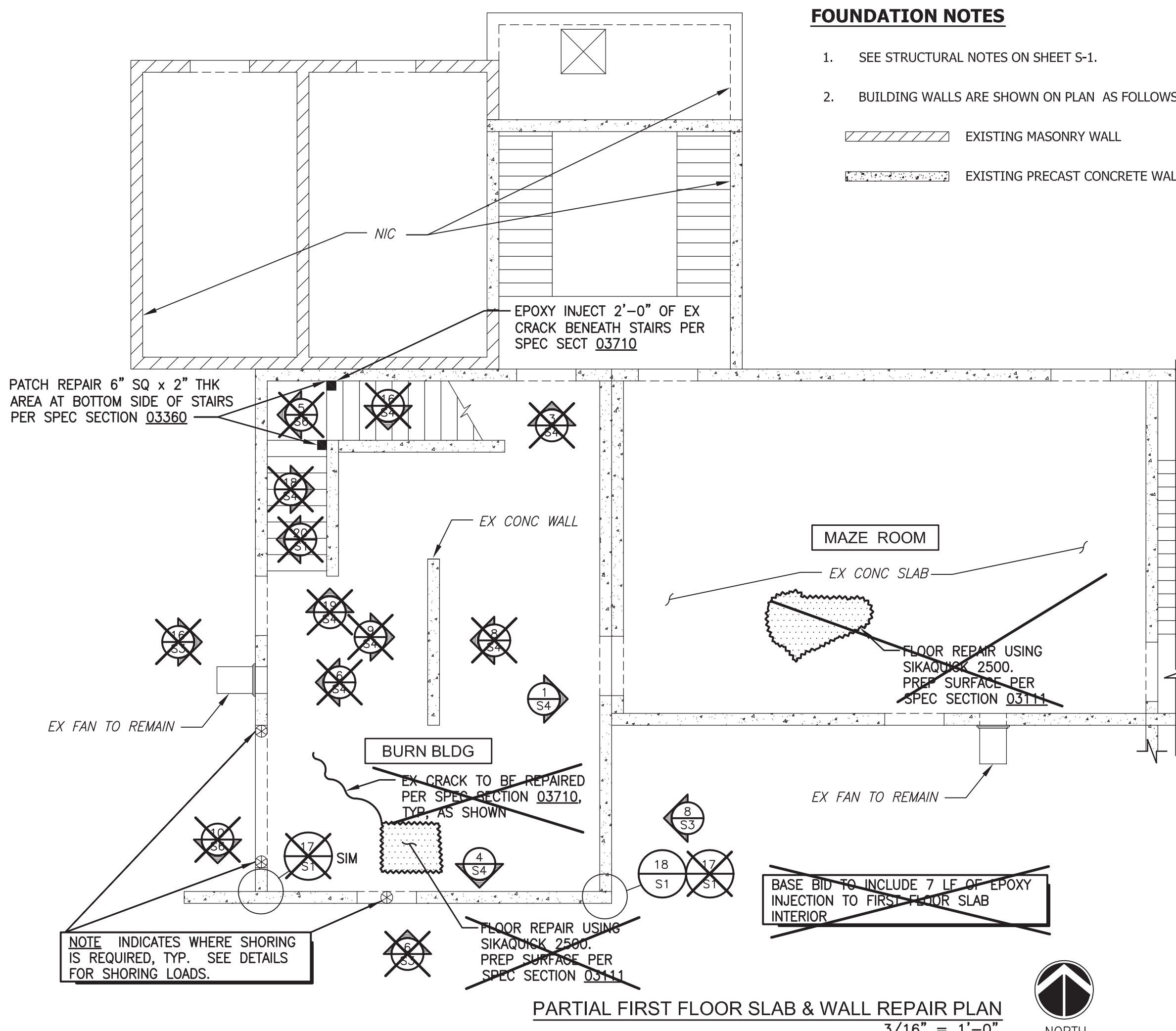
STRUCTURAL NOTES
AND DETAILS

DRAWING

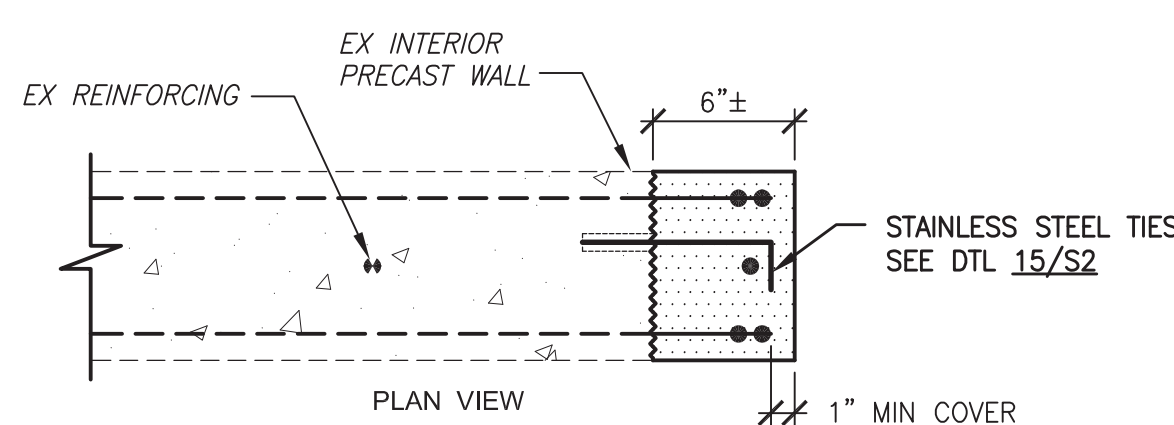
S1

SHEET
2 OF 8

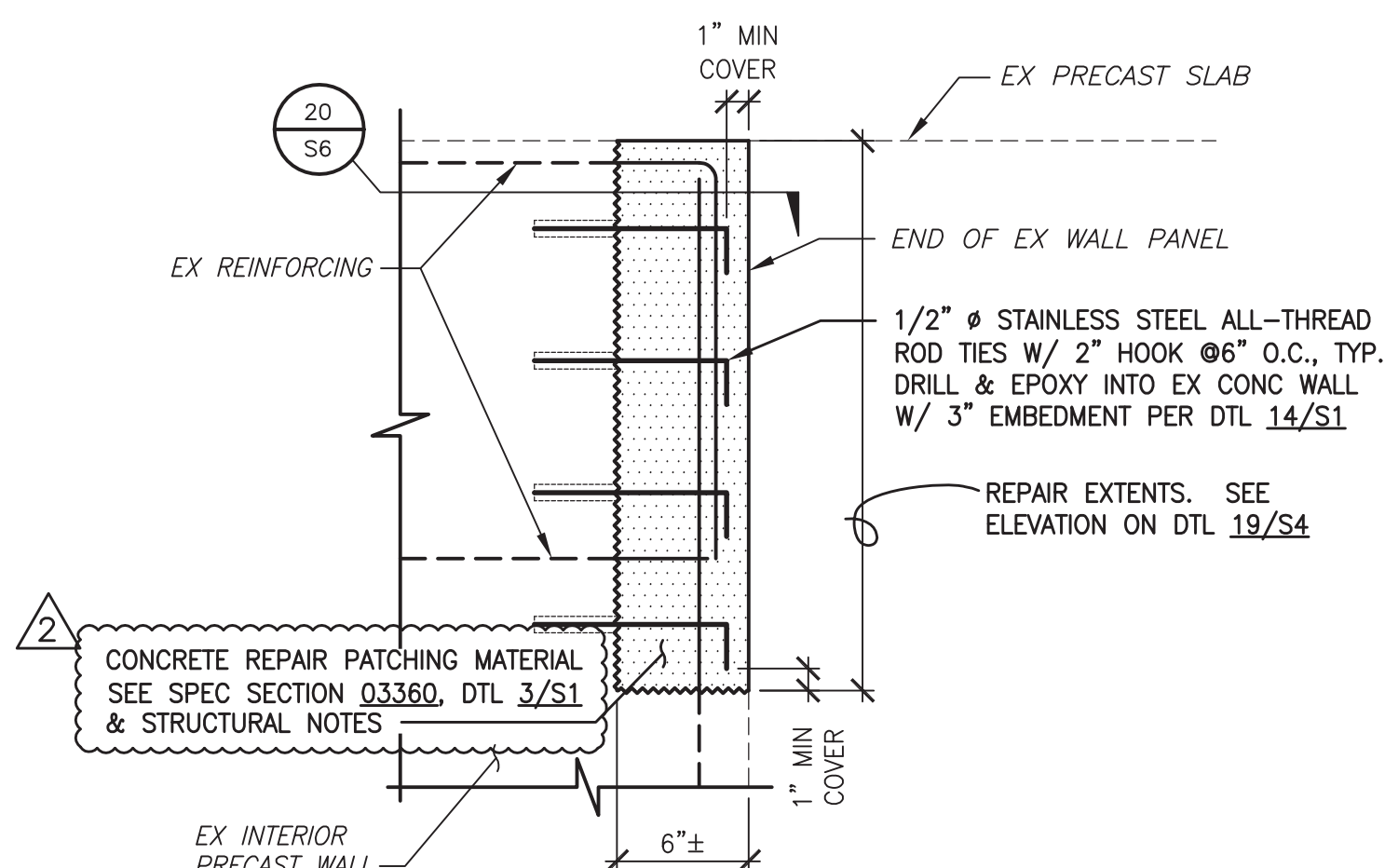
CATALOG NUMBER:
A-176935



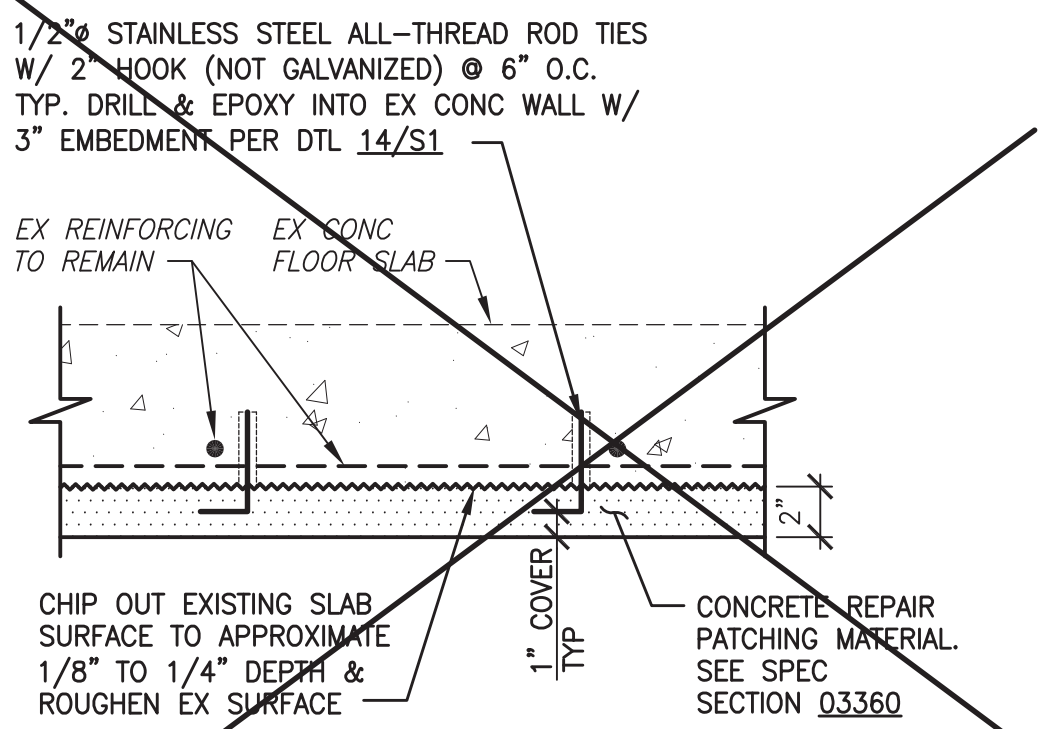
9 PERIMETER OF ROOF OPENING REPAIR
1 1/2" = 1'-0"



10 END OF WALL REPAIR - PLAN
1 1/2" = 1'-0"



15) END OF WALL REPAIR - ELEVATION $1\ 1/2" = 1'-0"$



19 CEILING REPAIR - 2ND FLOOR CONCRETE SLAB
1 1/2" = 1'-0"

2 ADDENDUM NO. 2 – CONCRETE REPAIR AREAS



DRAWN BY: ESORENSEN
ENGINEER: S SAFI
APPROVED BY: S GANSTAD

CITY OF MESA
ENGINEERING DEPARTMENT

PSTF EXISTING BURN BUILDING
3260 NORTH 40TH STREET

FLOOR AND CEILING REPAIR PLANS & DETAILS

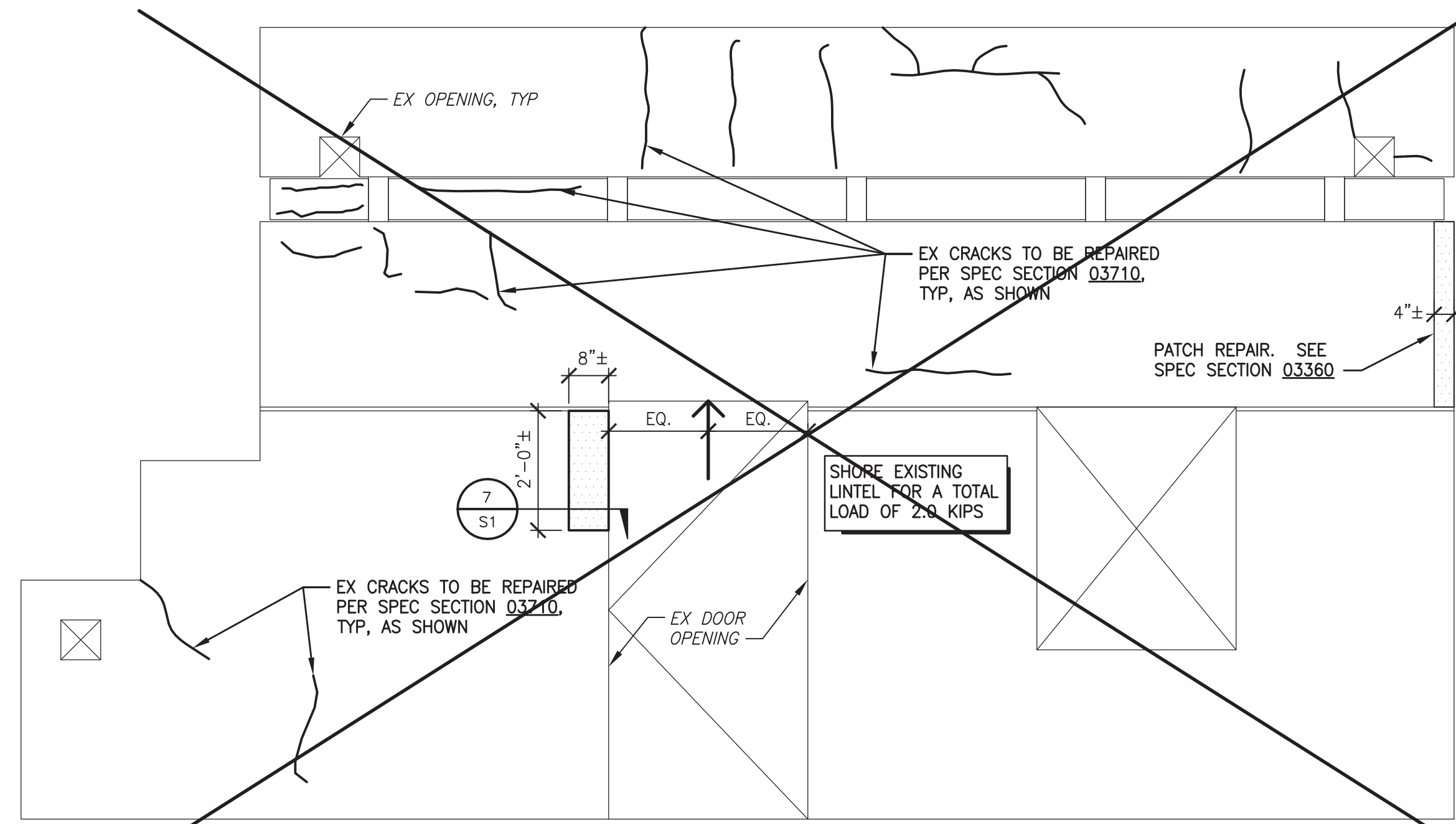
DRAWING
S2

ACTIVITY: 1675
PROJ. NO.: CP0096-1

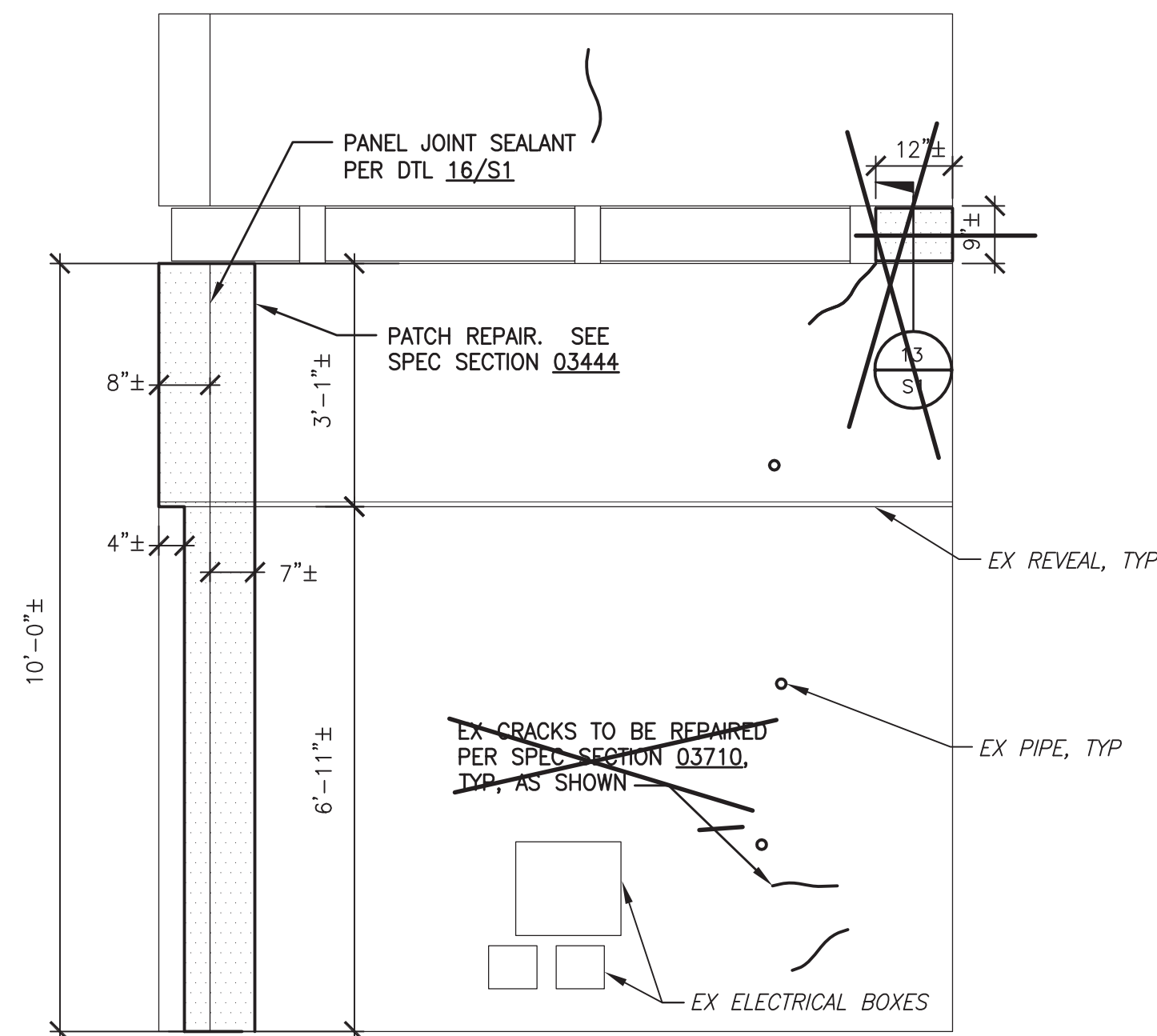
SHEET
3 OF 8

CATALOG NUMBER:
176936

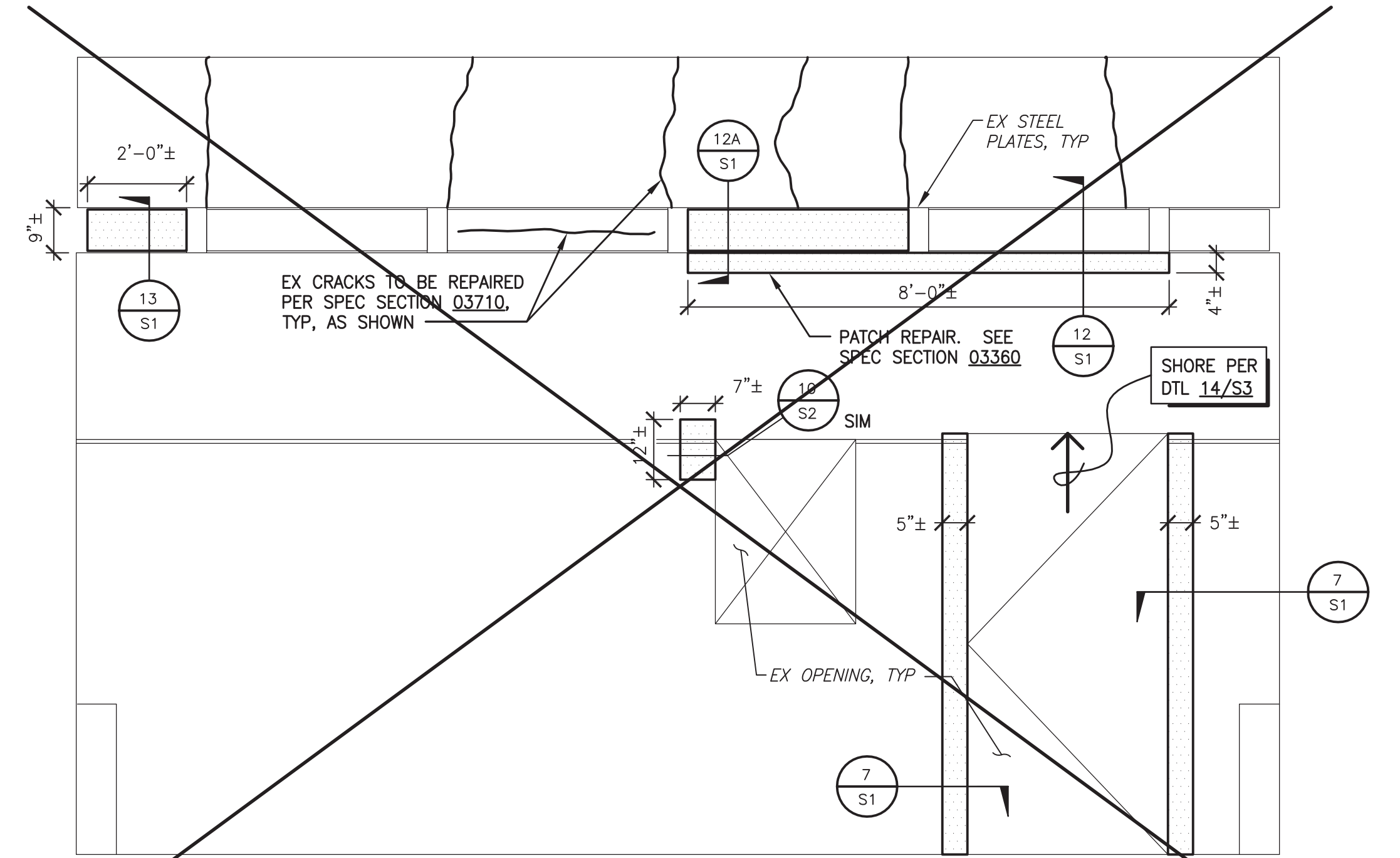
DATE: 7/9/15 I:\CP0096 PUBLIC SAFETY TRAINING FACILITY BURN ROOM\CP0096-1 PSTF EX BURN BLDG STRUCTURAL REPAIRS\DESIGN\CADD FILES\PLANS\CP0096-1 04 S3 WALL-ELEVS.DWG



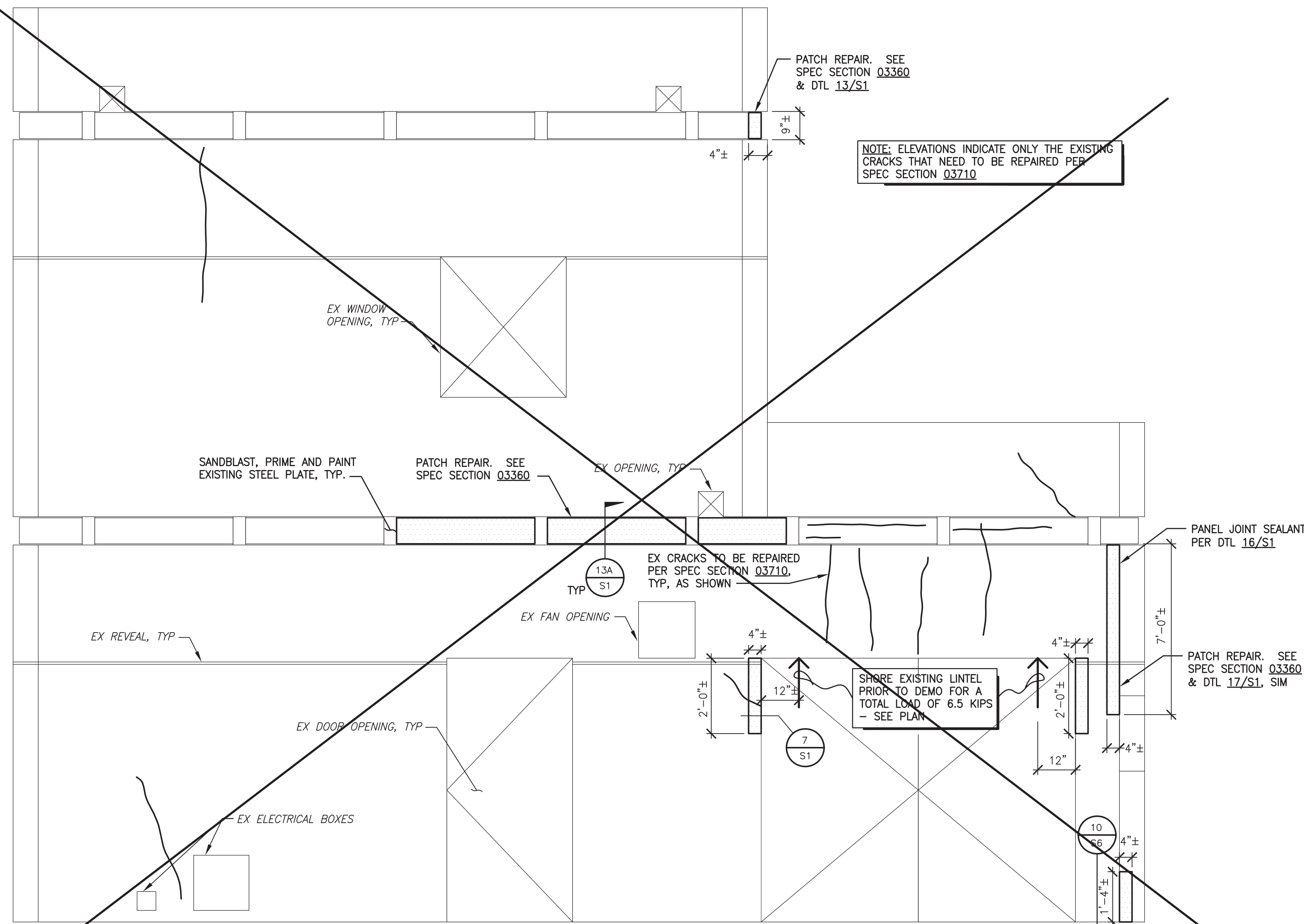
6 SOUTH EXTERIOR ELEVATION AT GROUND FLOOR
LOOKING NORTH
1/2" = 1'-0"



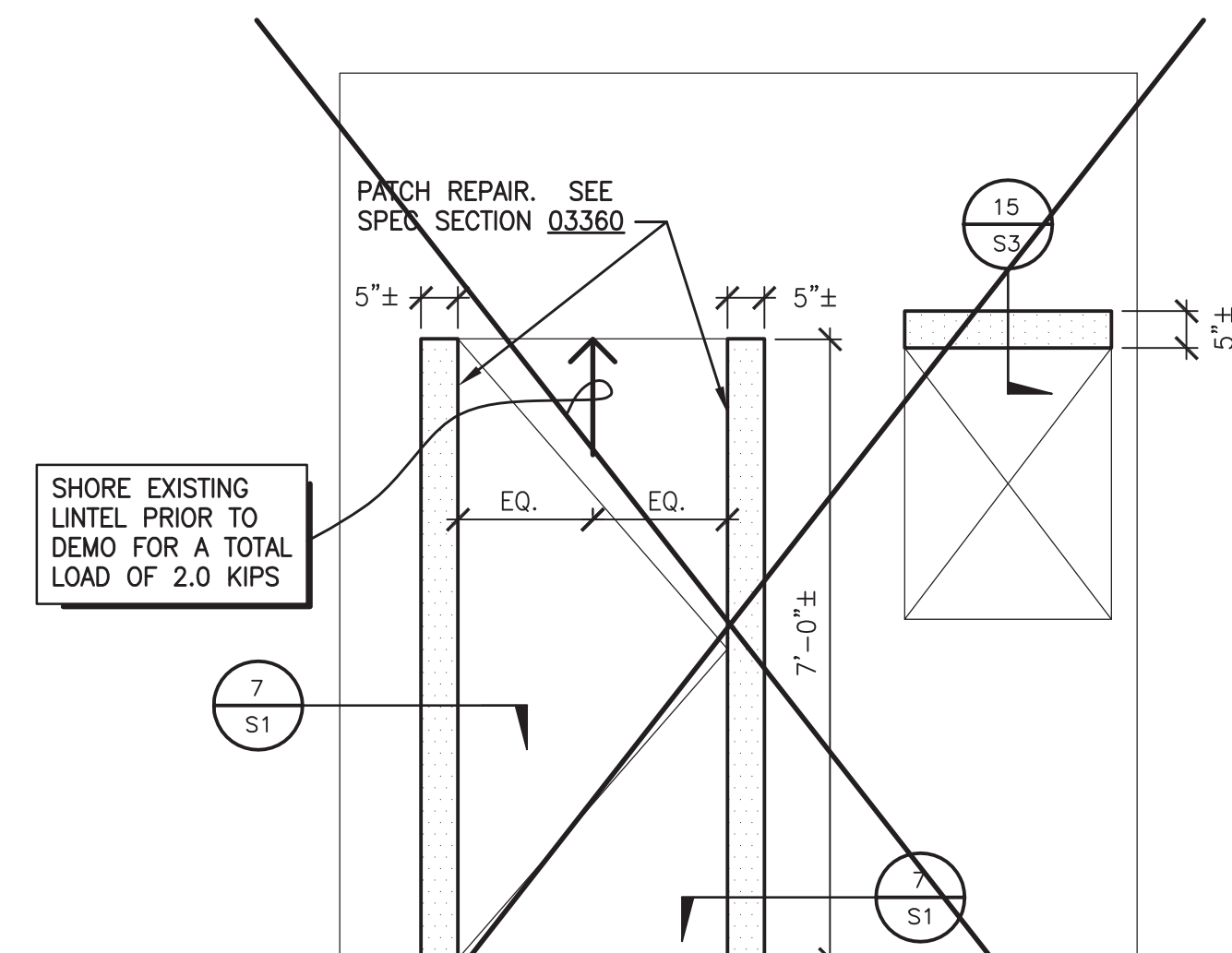
8 EAST EXTERIOR ELEVATION
LOOKING WEST
1/2" = 1'-0"



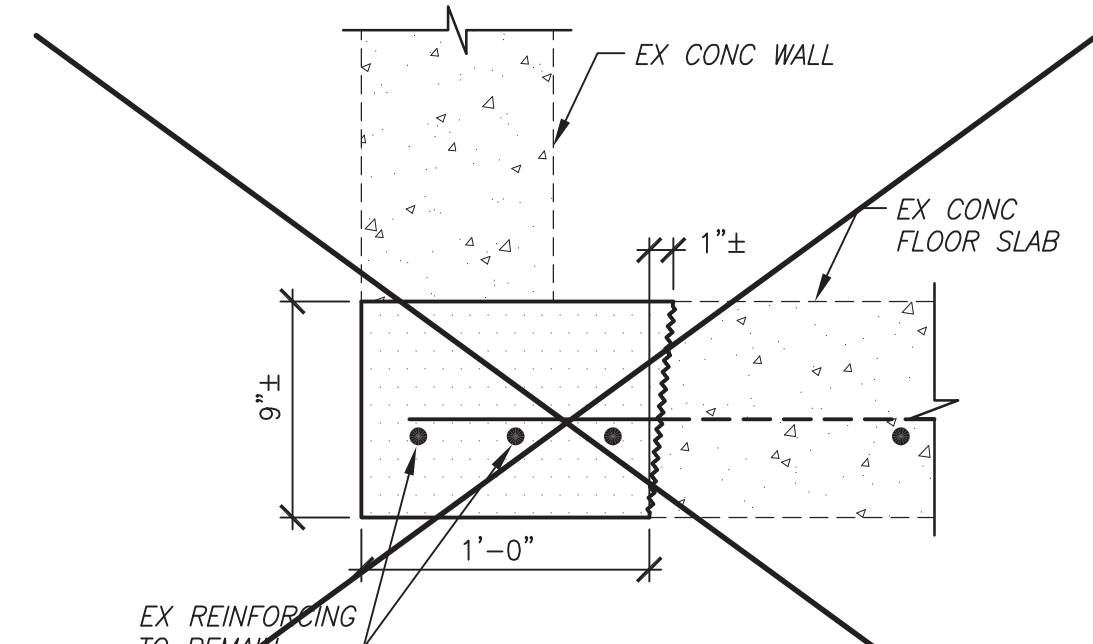
9 SOUTH EXTERIOR ELEVATION AT SECOND FLOOR
LOOKING NORTH
1/2" = 1'-0"



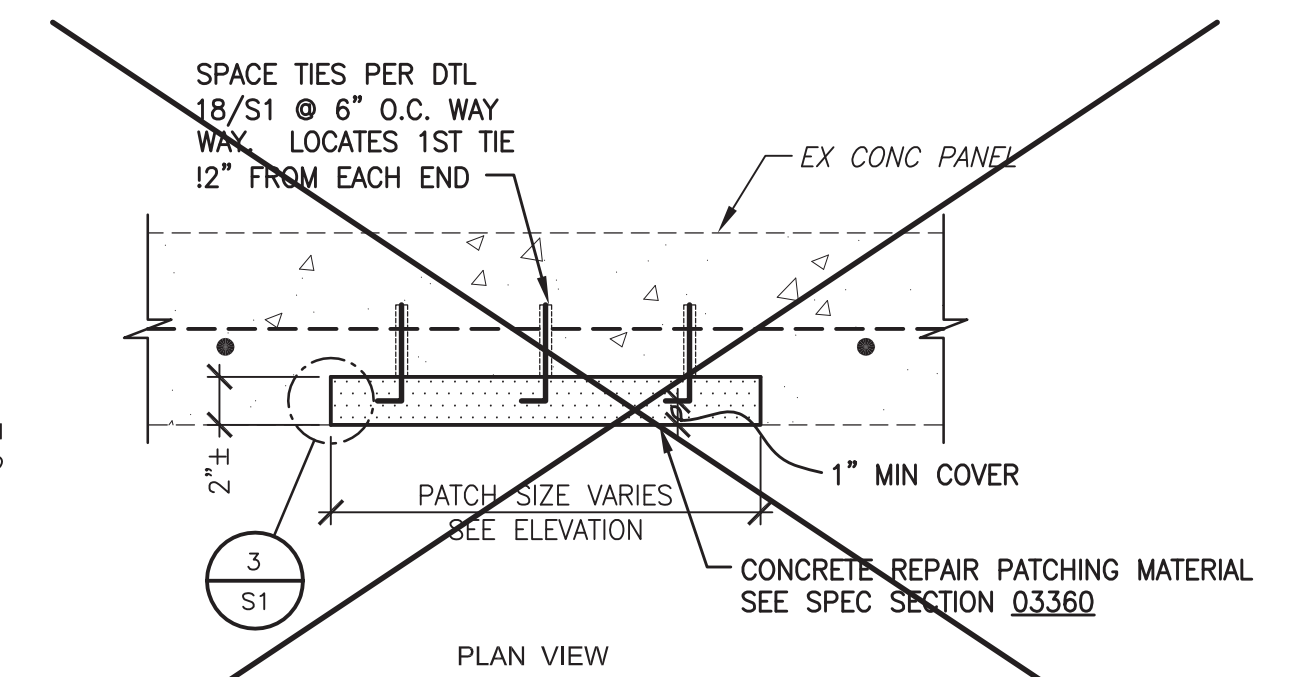
16 WEST EXTERIOR ELEVATION
LOOKING EAST
1/2" = 1'-0"



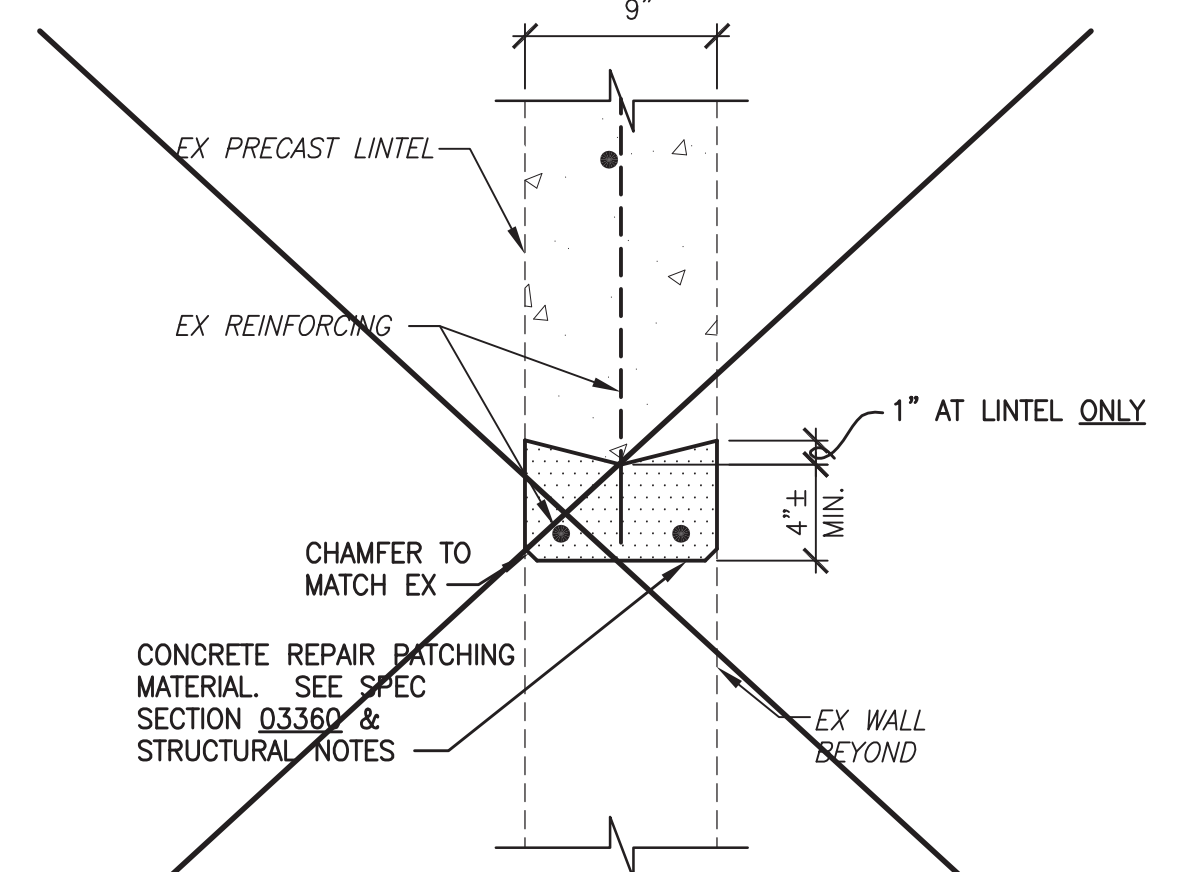
14 SOUTH INTERIOR ELEVATION AT SECOND FLOOR
LOOKING SOUTH
1/2" = 1'-0"



19 ELEVATION - REPAIR AT EDGE OF FLOOR SLAB
1 1/2" = 1'-0"



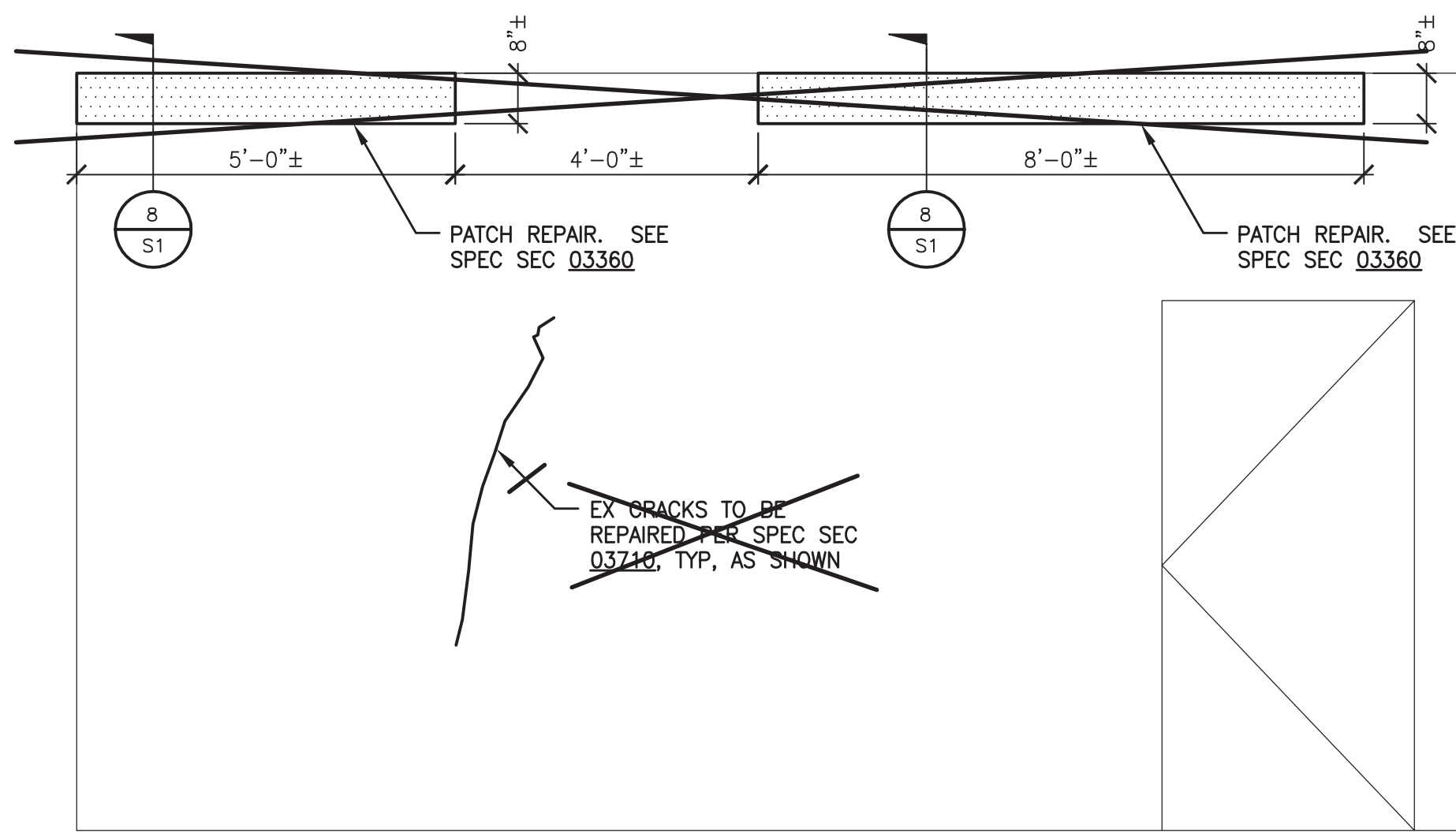
10 WALL PANEL SURFACE REPAIR - PLAN
1 1/2" = 1'-0"



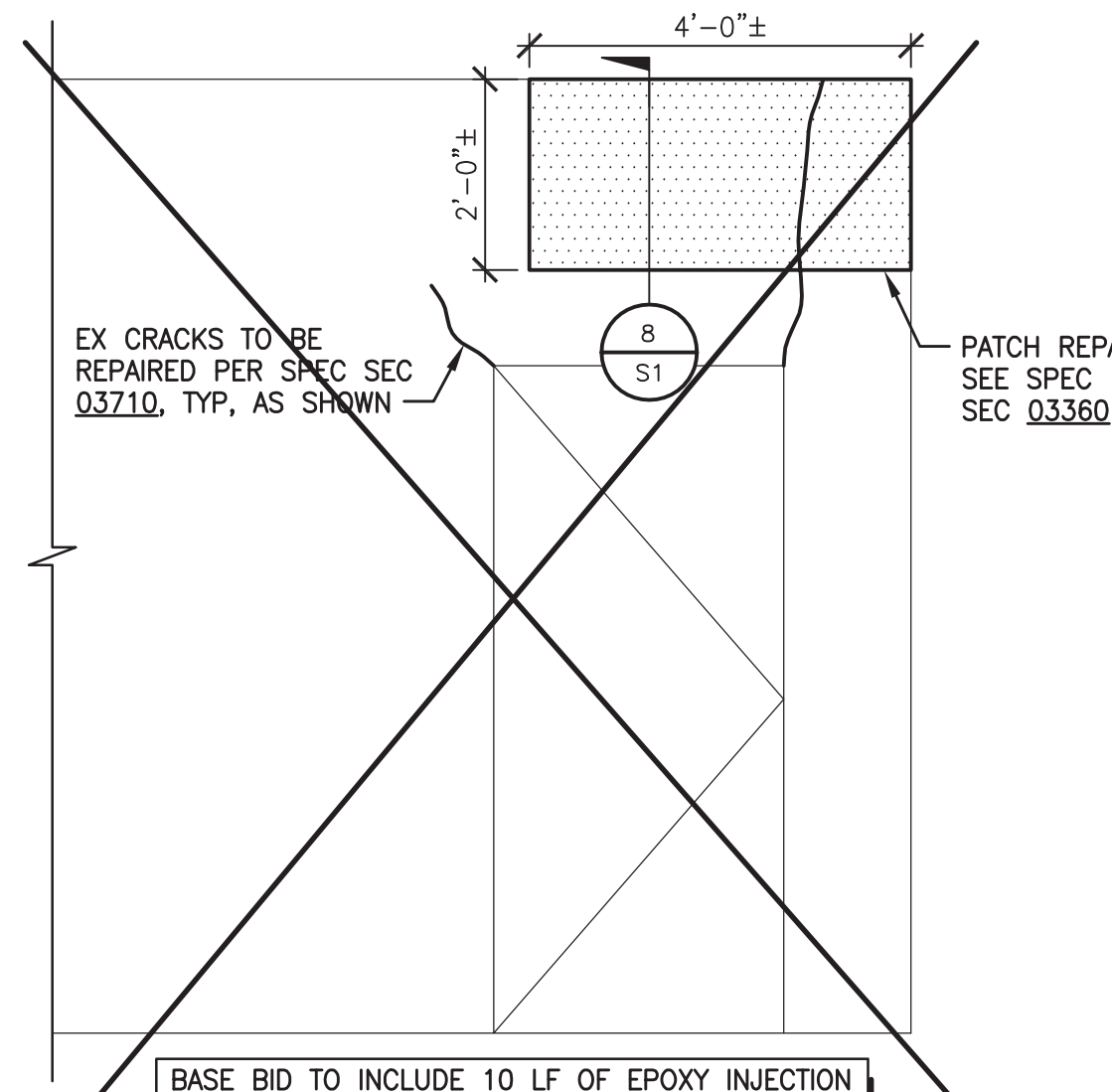
15 LINTEL OPENING REPAIR - ELEVATION
1 1/2" = 1'-0"

	CITY OF MESA ENGINEERING DEPARTMENT	
	PSTF EXISTING BURN BUILDING 3260 NORTH 40TH STREET	
	WALL ELEVATIONS & DETAILS	DRAWING S3
	ACTIVITY: 1875 PROJ. NO.: CP0096-1	SHEET 4 OF 8

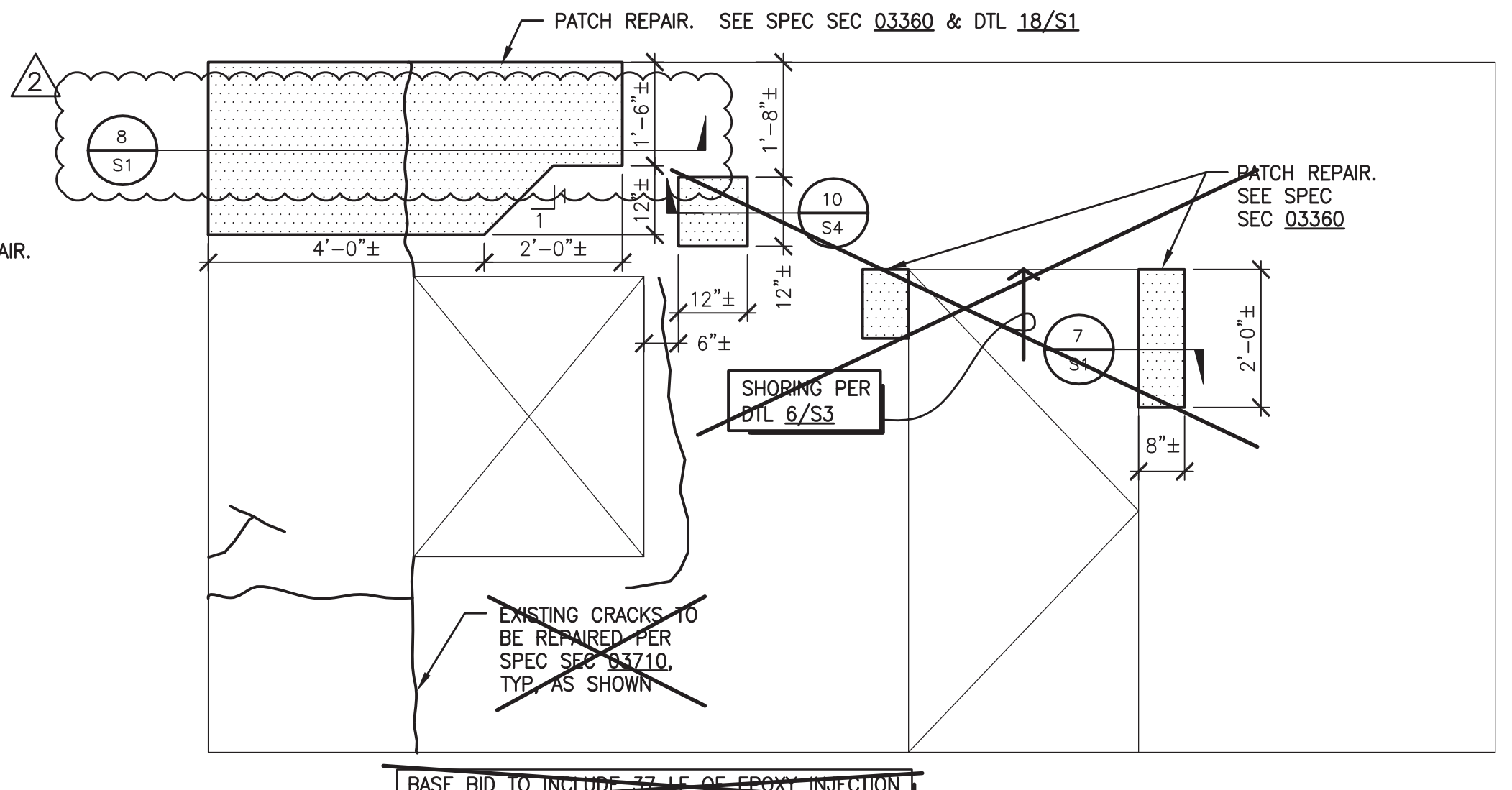
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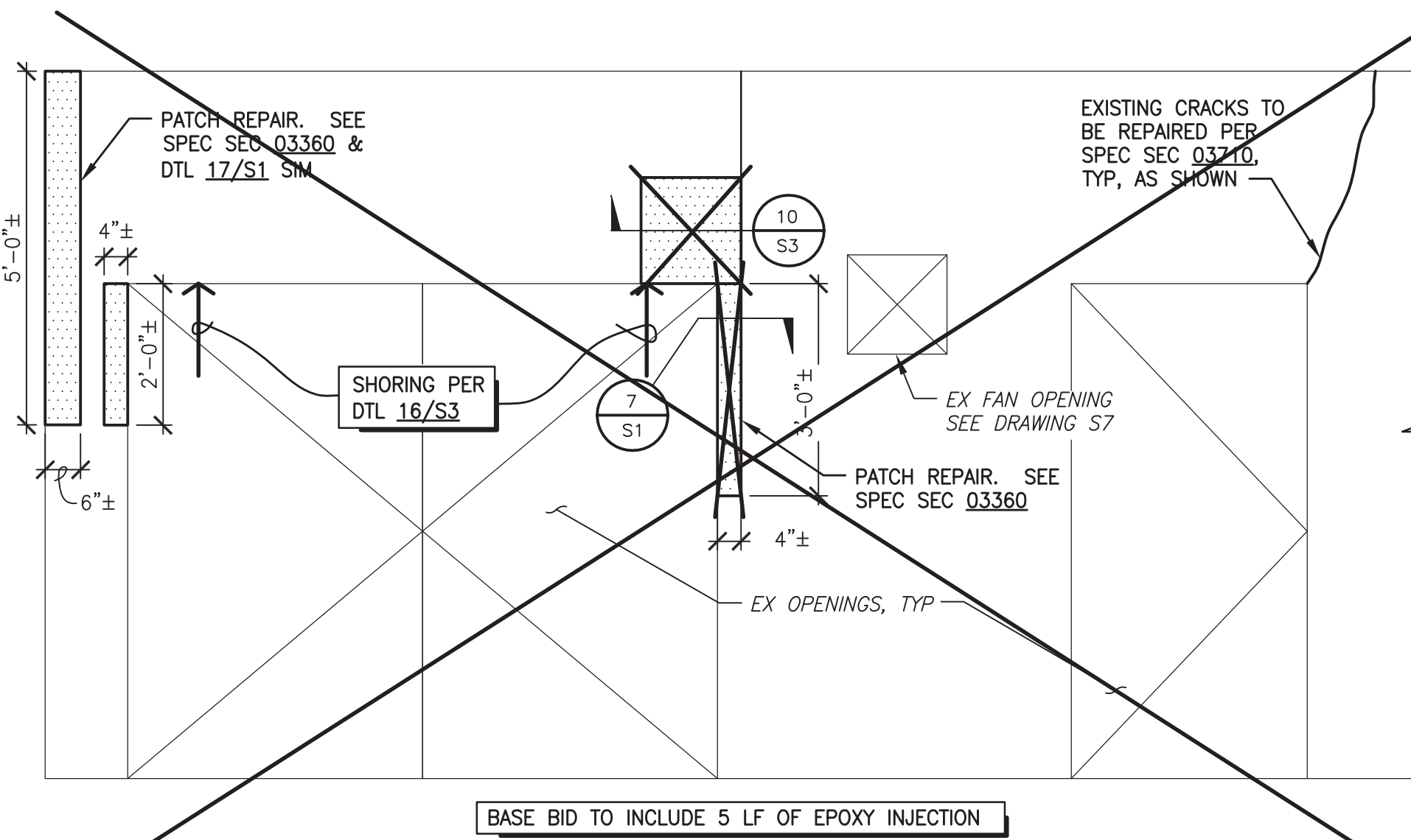
1 EAST INTERIOR ELEVATION
AT 1ST FLOOR, LOOKING EAST 1/2" = 1'-0"



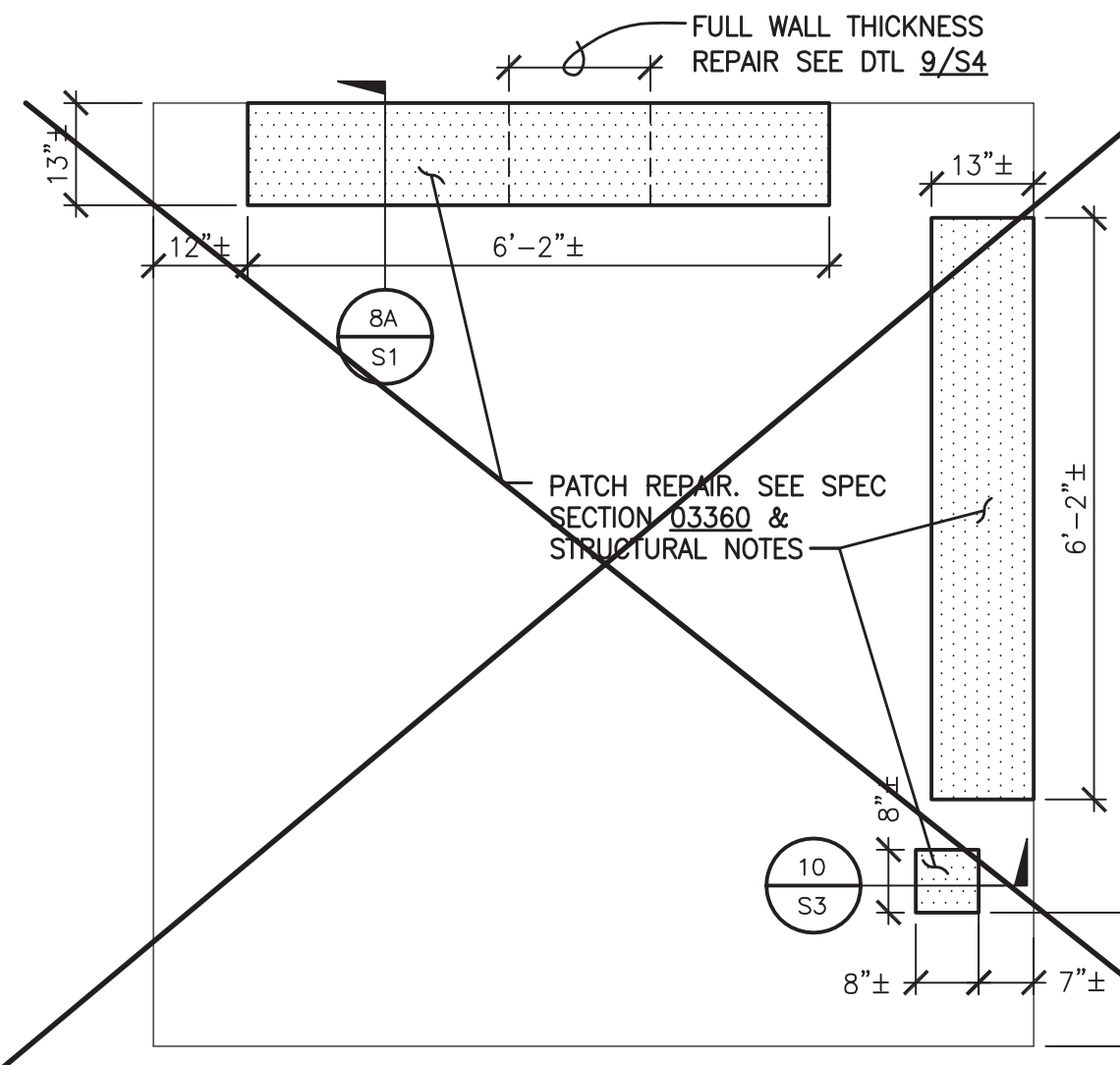
3 NORTH INTERIOR ELEVATION
AT 1ST FLOOR, LOOKING NORTH 1/2" = 1'-0"



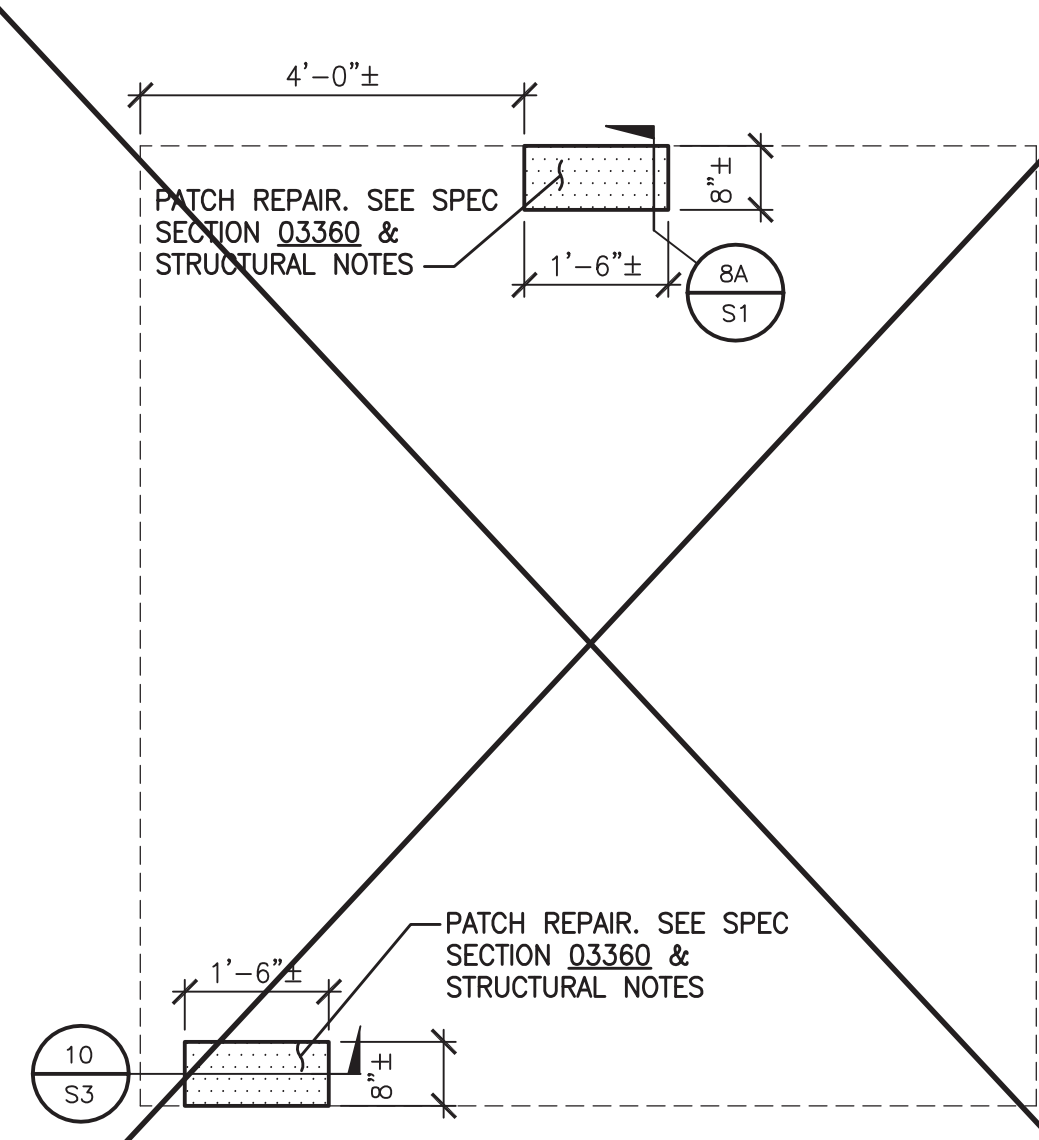
4 SOUTH INTERIOR ELEVATION
AT 1ST FLOOR, LOOKING SOUTH 1/2" = 1'-0"



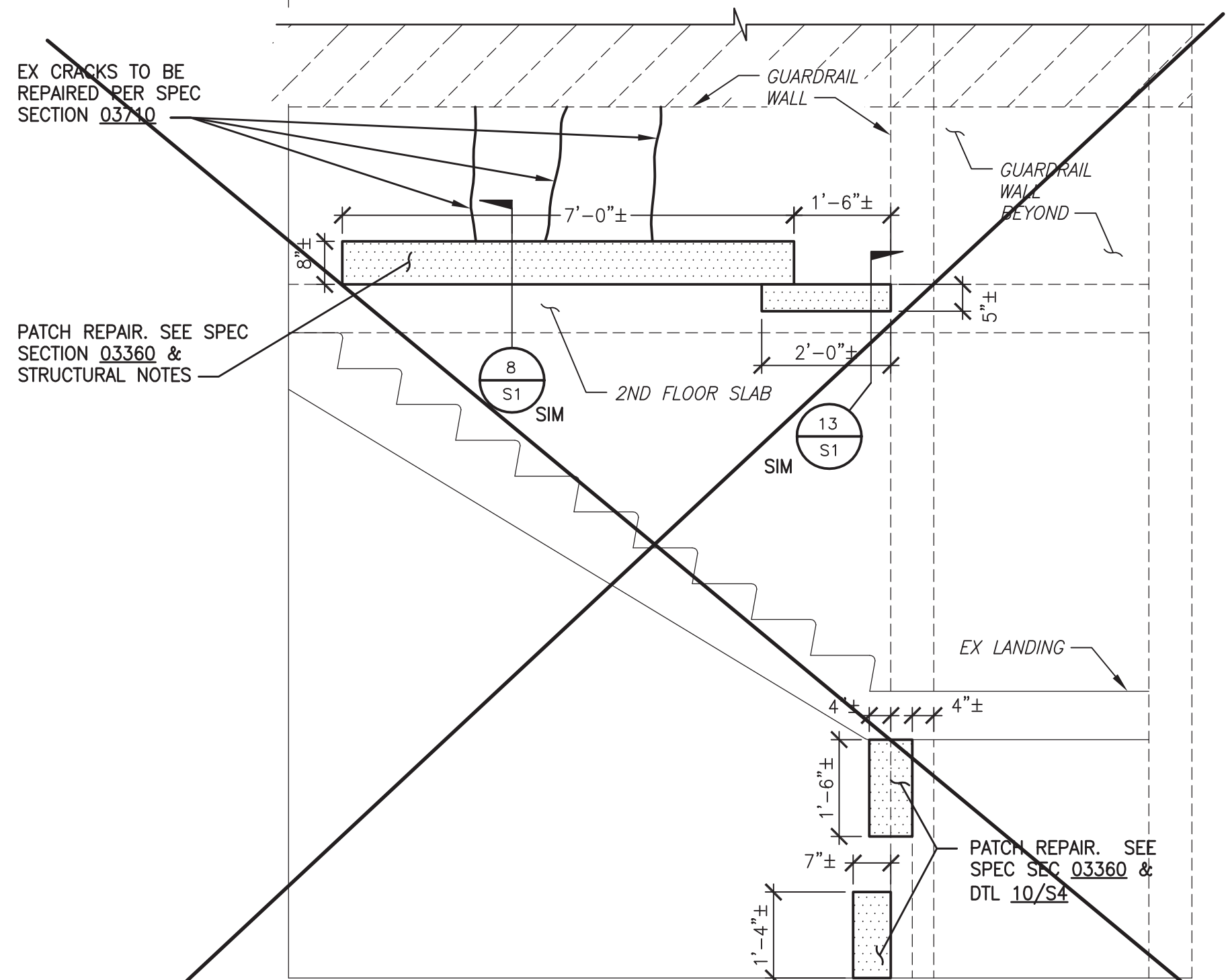
6 WEST INTERIOR ELEVATION
AT 1ST FLOOR, LOOKING WEST 1/2" = 1'-0"



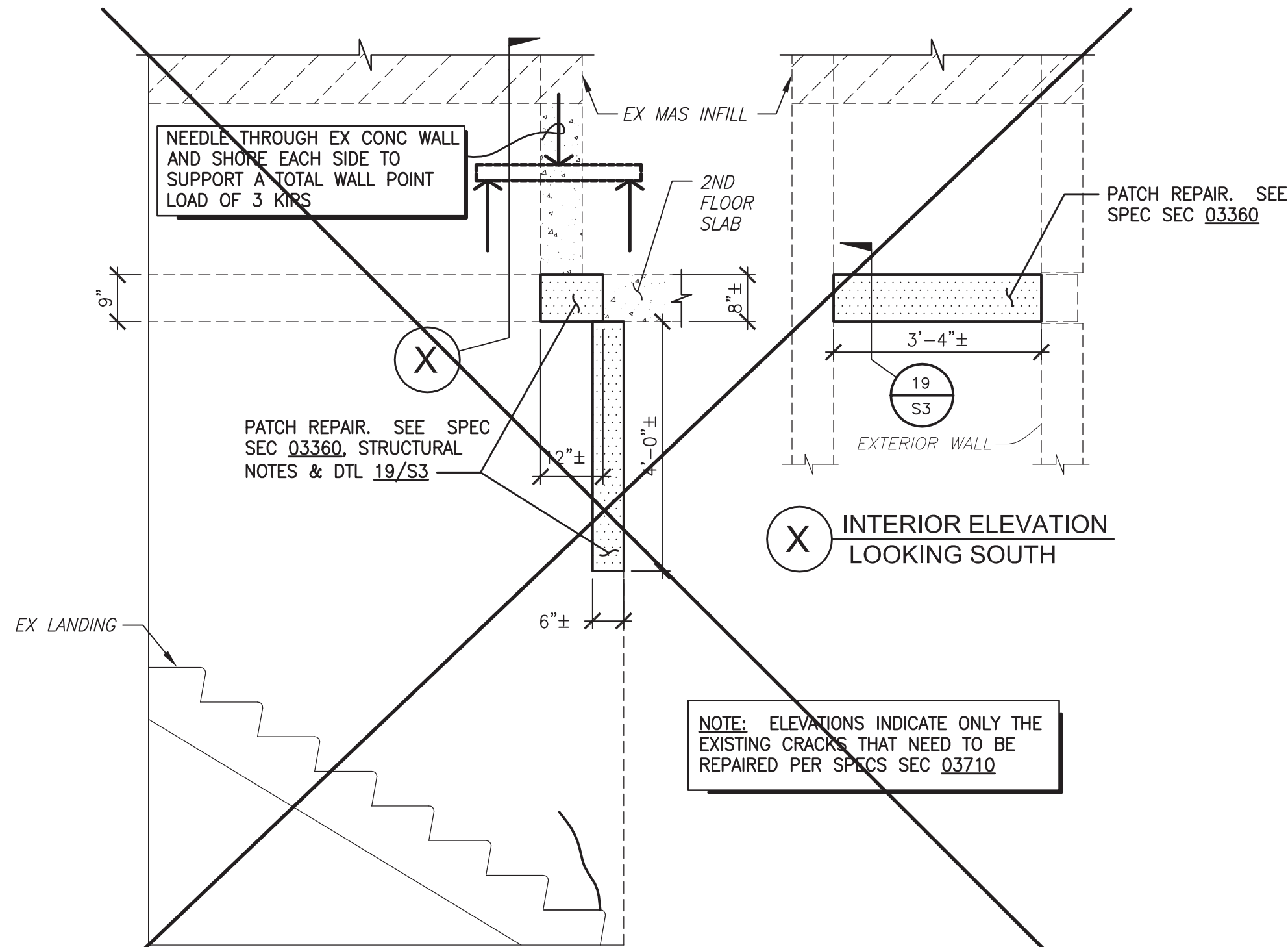
8 INTERIOR BEARING WALL ELEVATION
AT 1ST FLOOR, LOOKING WEST 1/2" = 1'-0"



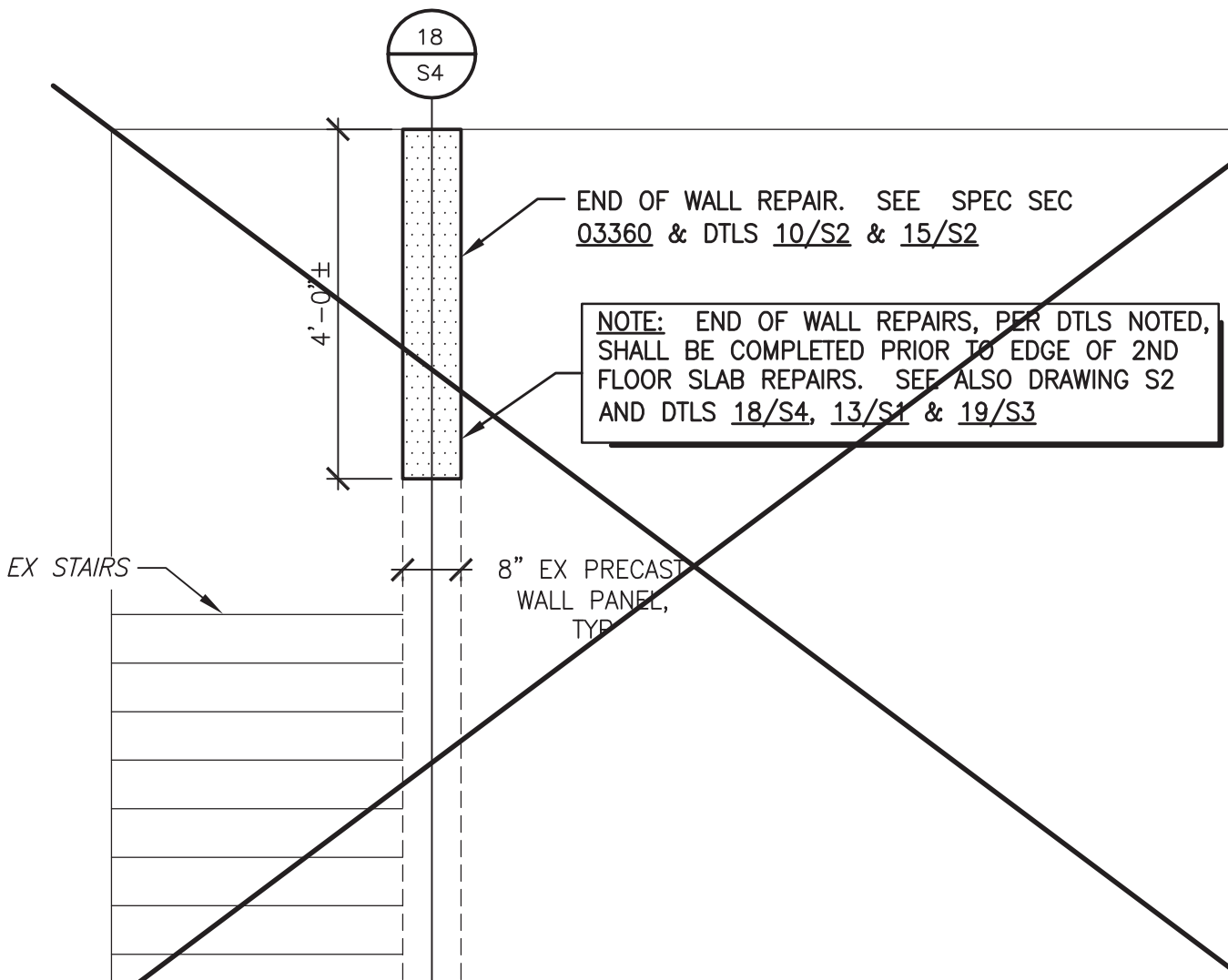
9 INTERIOR BEARING WALL ELEVATION
AT 1ST FLOOR, LOOKING EAST 1/2" = 1'-0"



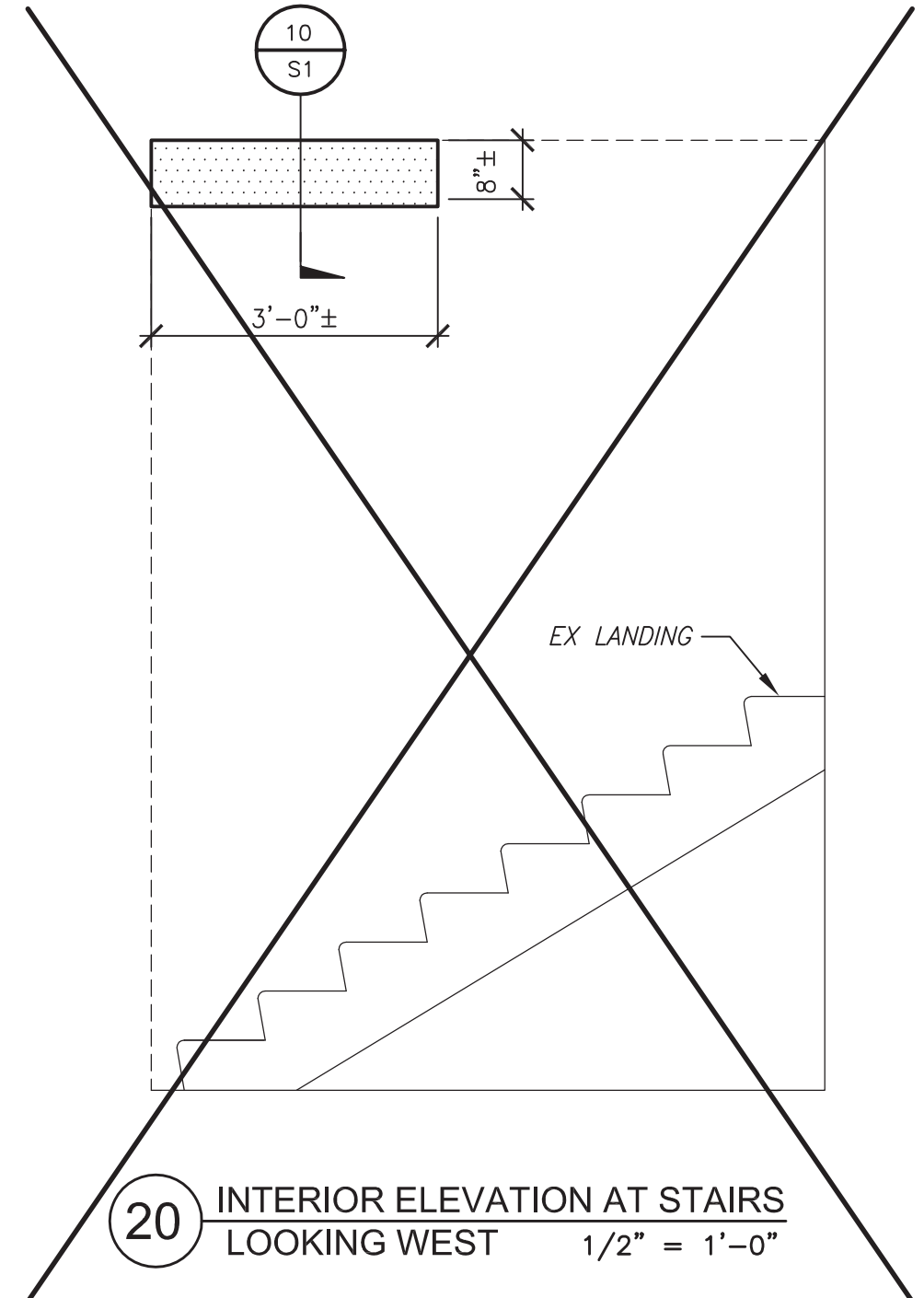
16 INTERIOR ELEVATION AT STAIRS
LOOKING SOUTH 1/2" = 1'-0"



18 INTERIOR ELEVATION AT STAIRS
LOOKING EAST 1/2" = 1'-0"



19 INTERIOR ELEVATION AT STAIRS
LOOKING NORTH 1/2" = 1'-0"



20 INTERIOR ELEVATION AT STAIRS
LOOKING WEST 1/2" = 1'-0"

2 ADDENDUM NO. 2 - ELEVATION 4



DRAWN BY: ESORENSEN
ENGINEER: S. SAFI
APPROVED BY: S. GANSTROM

ACTIVITY: 1675
PROJ. NO.: CP0096-1

CITY OF MESA
ENGINEERING DEPARTMENT
PSTF EXISTING BURN BUILDING
3260 NORTH 40TH STREET

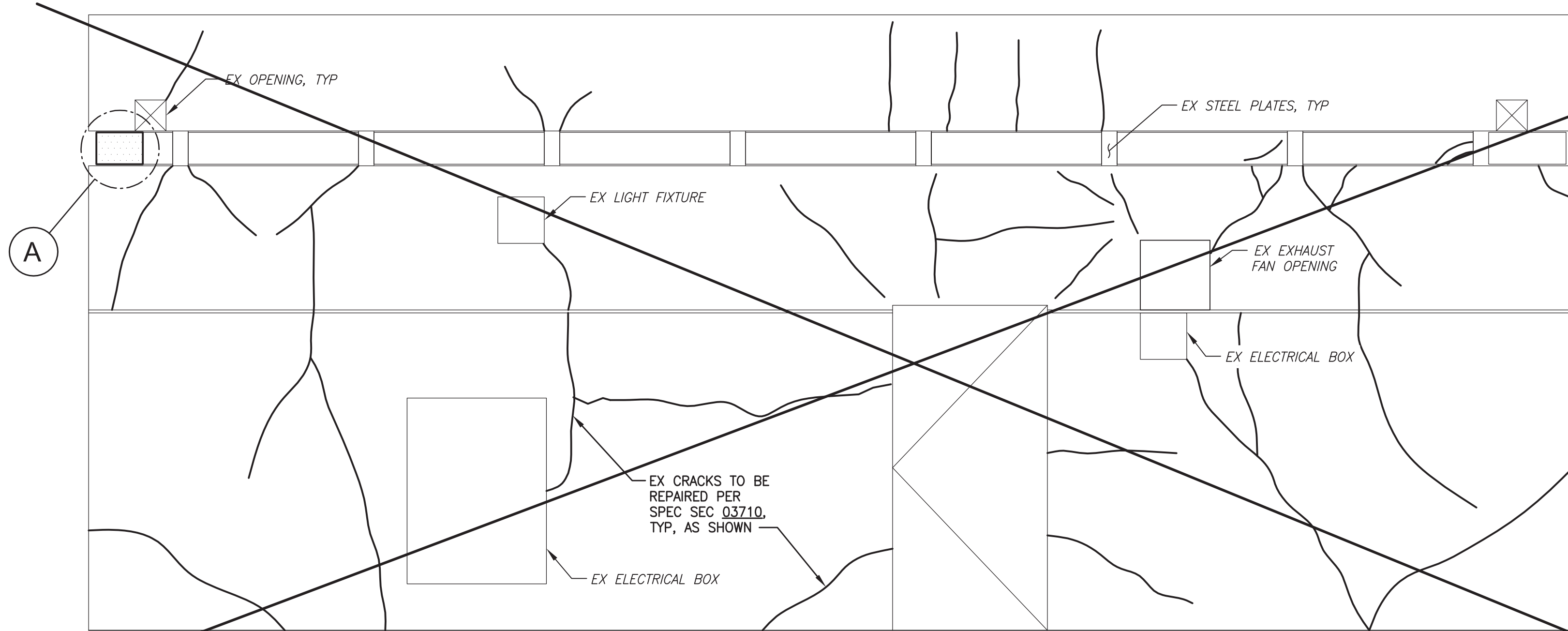
INTERIOR WALL
ELEVATIONS & DETAILS

SHEET
5 OF 8

CATALOG NUMBER:
A-176938

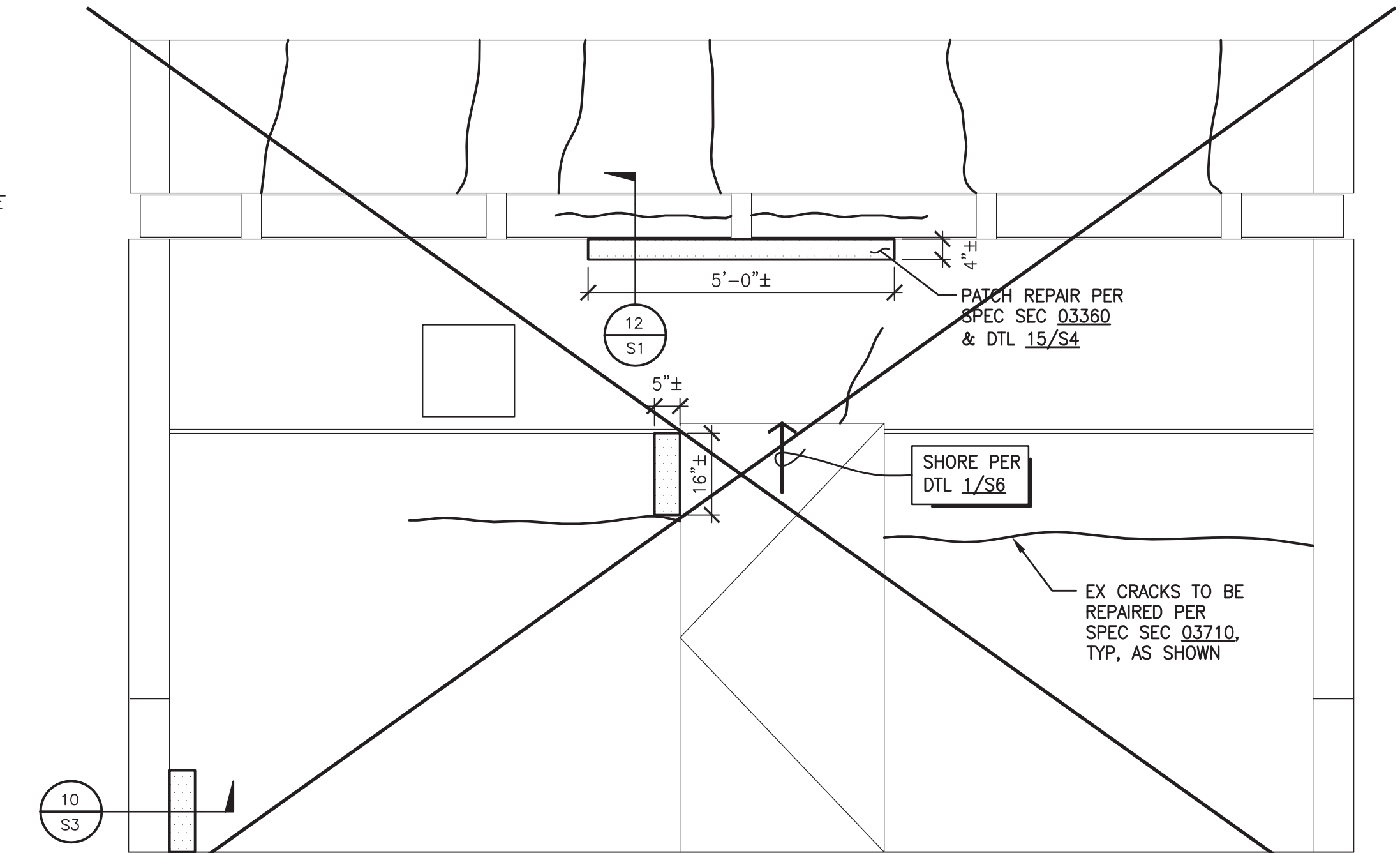
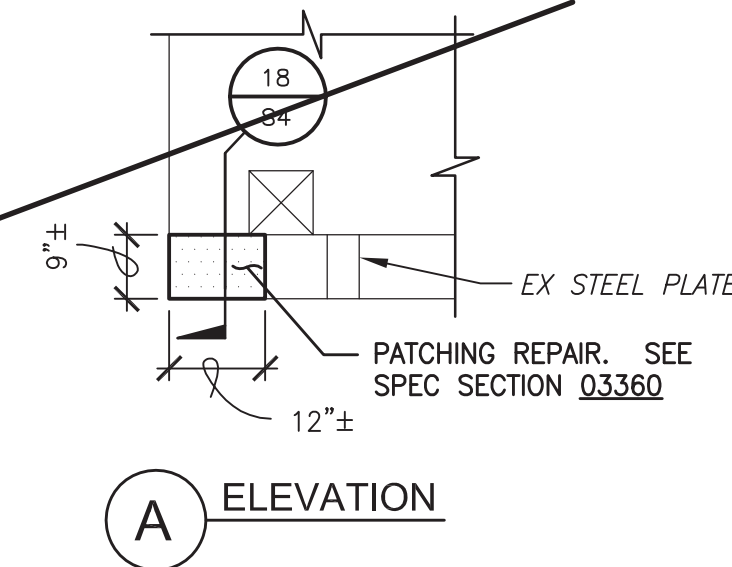
DRAWING
S4

DATE: 7/8/15 I:\CP0096 PUBLIC SAFETY TRAINING FACILITY BURN ROOM\CP0096-1 PSTF EX BURN BLDG STRUCTURAL REPAIRS\CADD FILES\PLANS\CP0096-1 06 S5 WALL-ELEVS.DWG



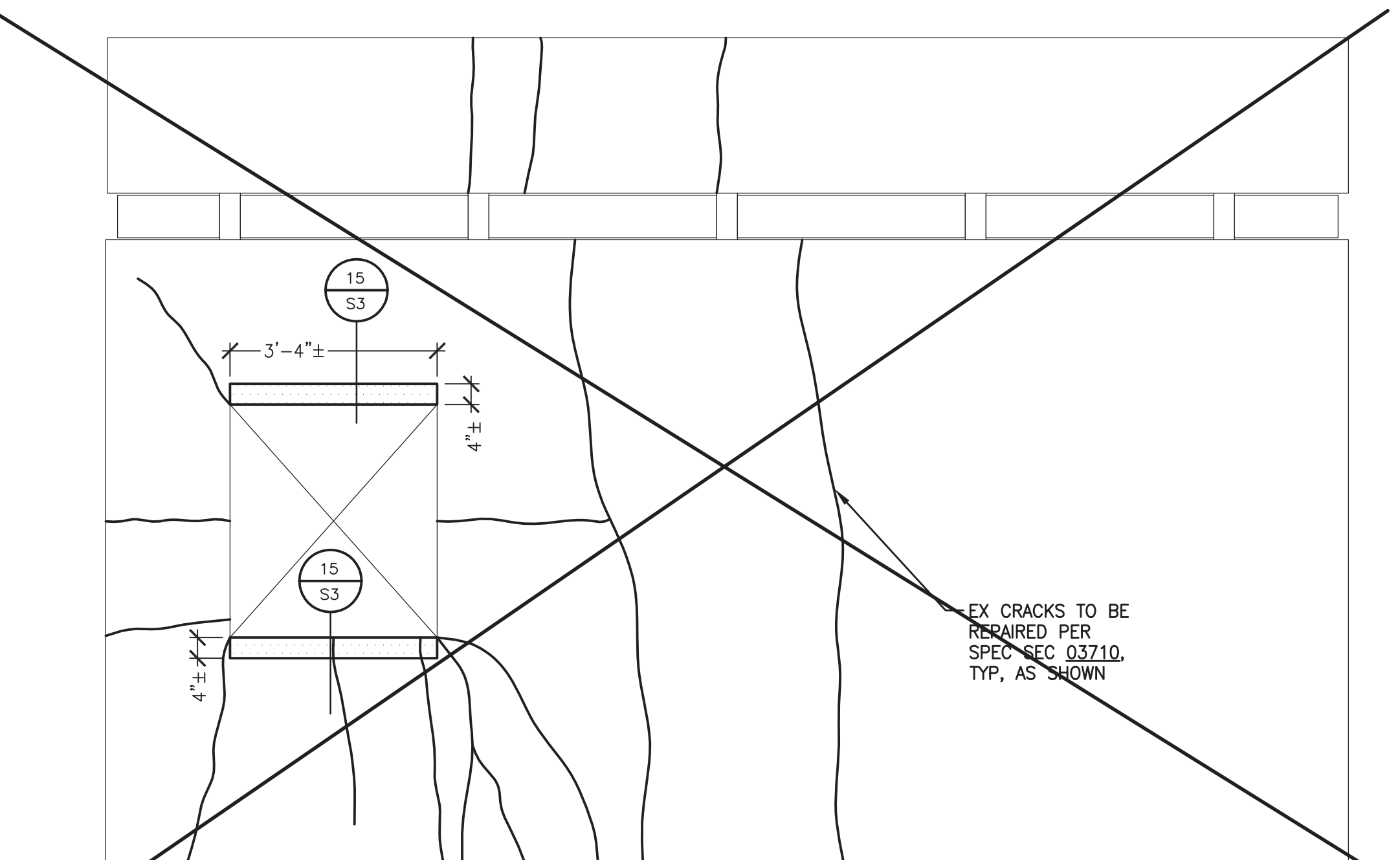
BASE BID TO INCLUDE 166 LF OF EPOXY INJECTION

6 SOUTH EXTERIOR ELEVATION AT MAZE ROOM
LOOKING NORTH 1/2" = 1'-0"



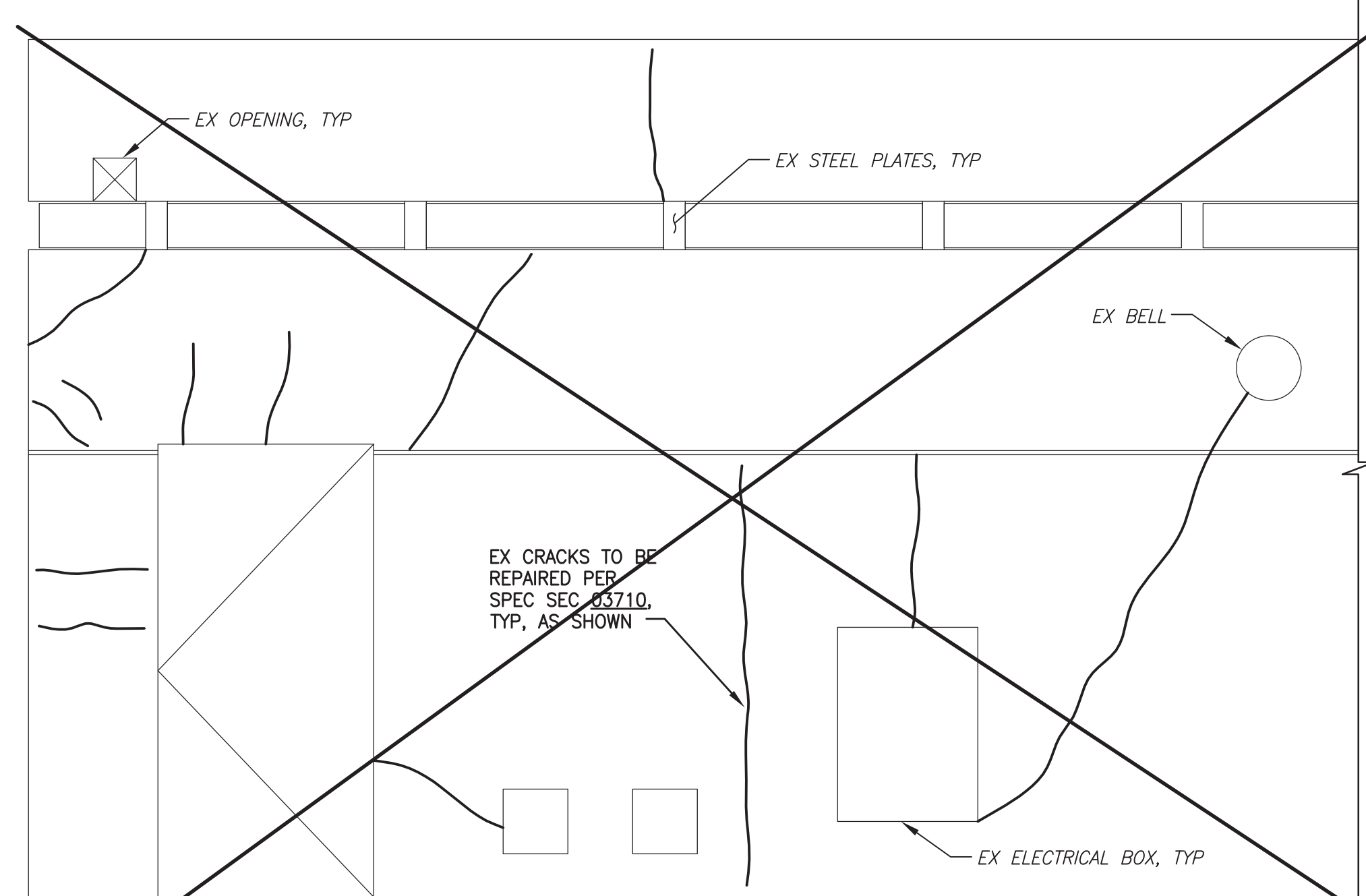
BASE BID TO INCLUDE 60 LF OF EPOXY INJECTION

8 EAST EXTERIOR ELEVATION
AT 2ND FLOOR, LOOKING WEST 1/2" = 1'-0"



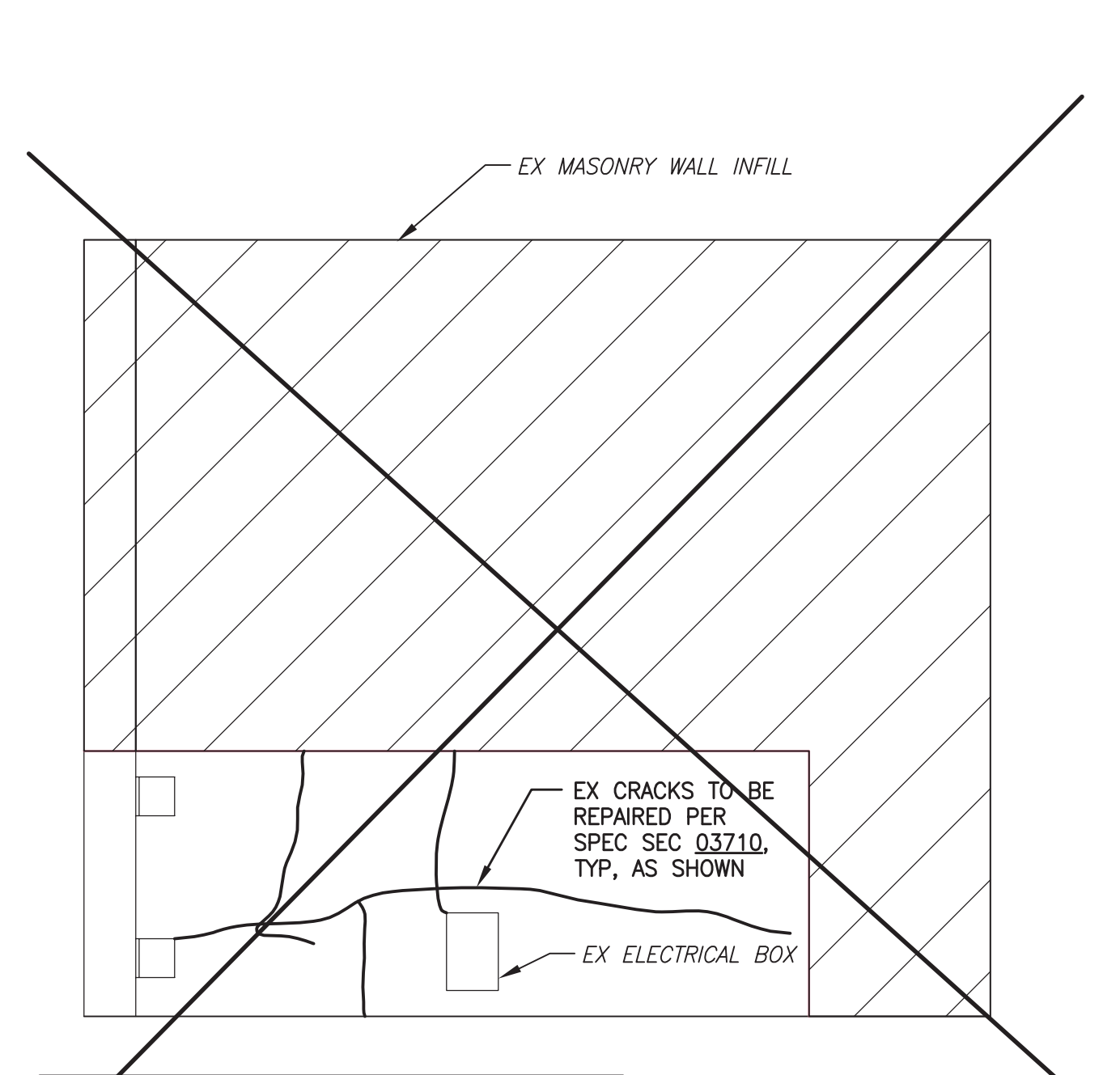
BASE BID TO INCLUDE 80 LF OF EPOXY INJECTION

11 NORTH EXTERIOR ELEVATION
AT 2ND FLOOR, LOOKING SOUTH 1/2" = 1'-0"



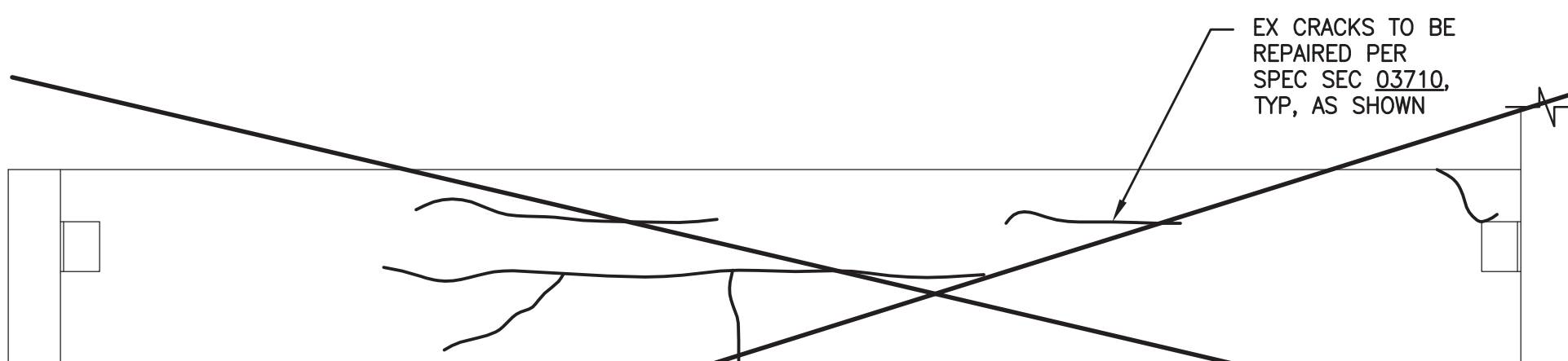
BASE BID TO INCLUDE 54 LF OF EPOXY INJECTION

13 NORTH PARTIAL EXTERIOR ELEVATION AT MAZE ROOM
LOOKING SOUTH 1/2" = 1'-0"



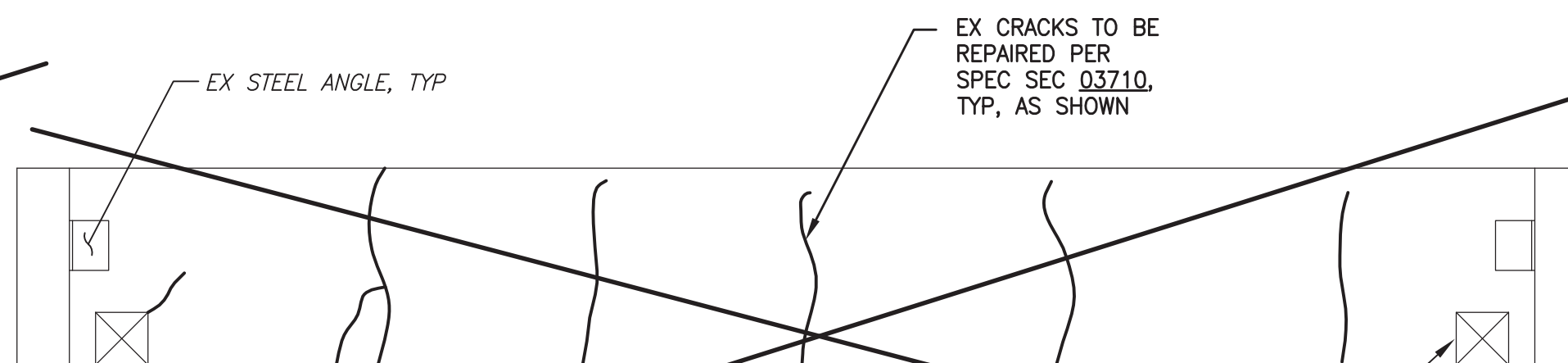
BASE BID TO INCLUDE 20 LF OF EPOXY INJECTION

15 NORTH INTERIOR ELEVATION
AT 2ND FLOOR, LOOKING NORTH 1/2" = 1'-0"



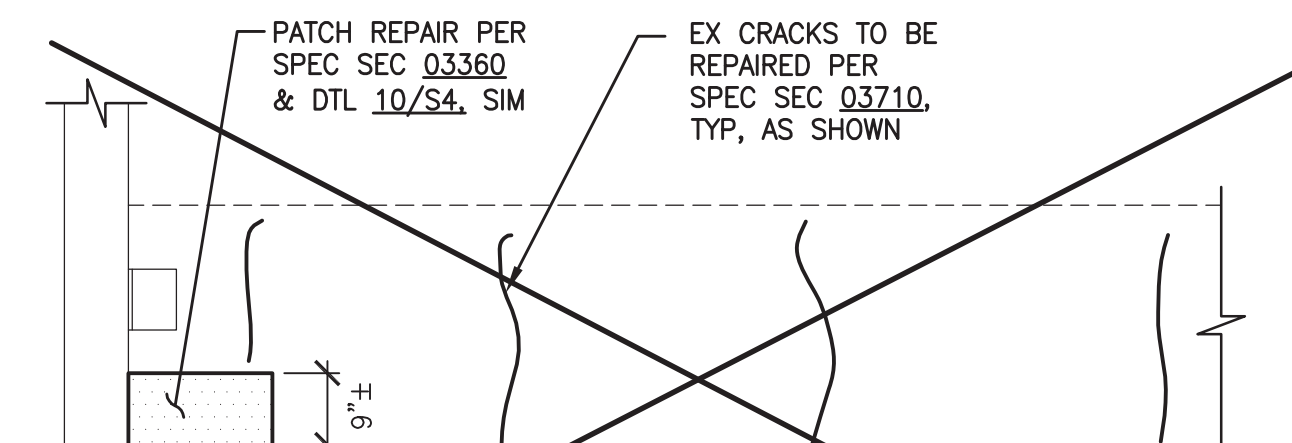
BASE BID TO INCLUDE 33 LF OF EPOXY INJECTION

16 WEST ELEVATION
AT SECOND FLOOR, LOOKING WEST 1/2" = 1'-0"



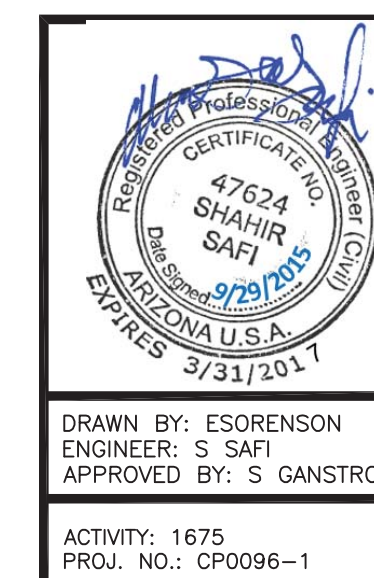
BASE BID TO INCLUDE 20 LF OF EPOXY INJECTION

17 SOUTH ELEVATION
AT 2ND FLOOR, LOOKING SOUTH 1/2" = 1'-0"



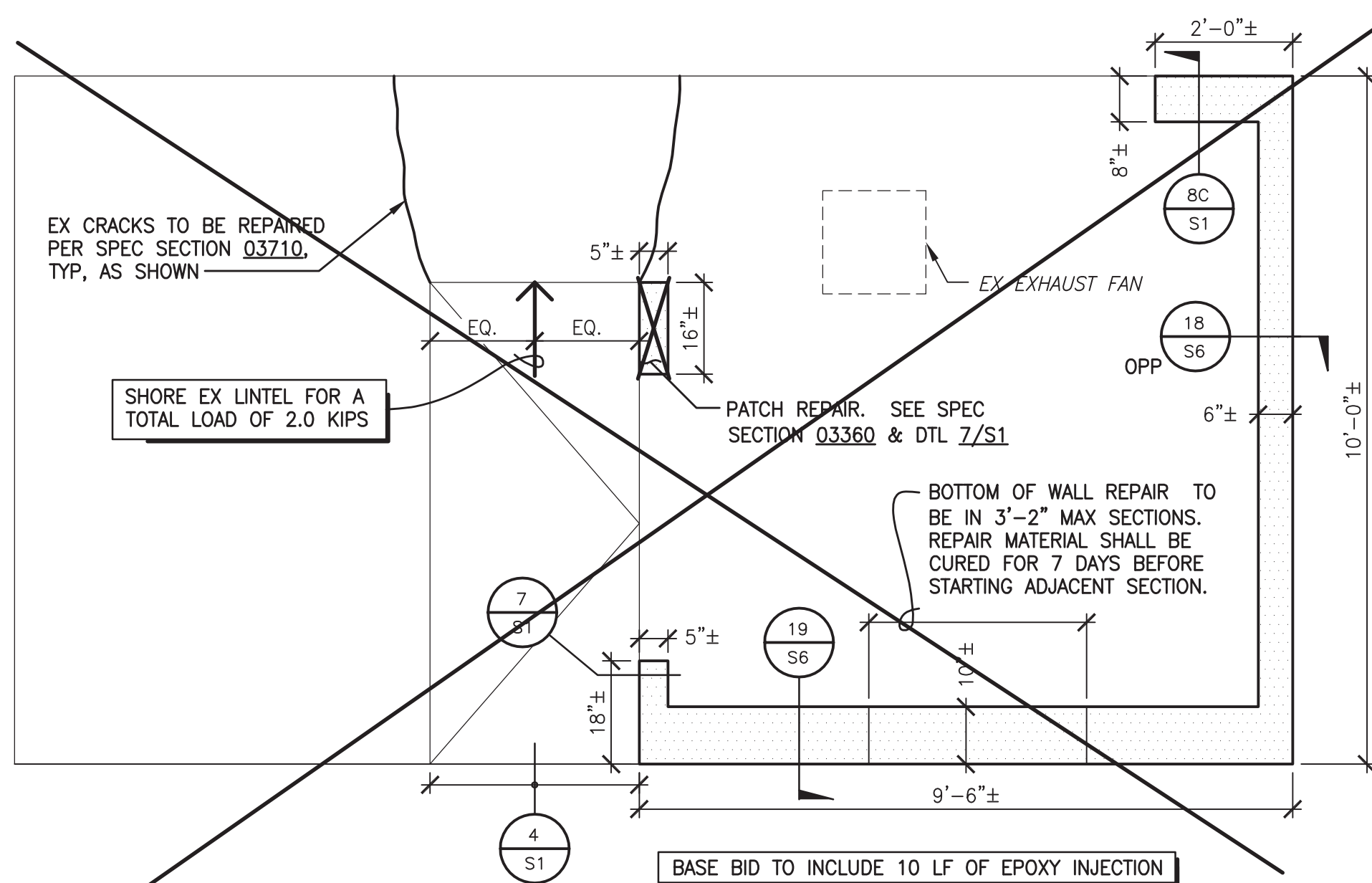
BASE BID TO INCLUDE 9 LF OF EPOXY INJECTION

19 PARTIAL EAST ELEVATION
AT 2ND FLOOR, LOOKING SOUTH 1/2" = 1'-0"

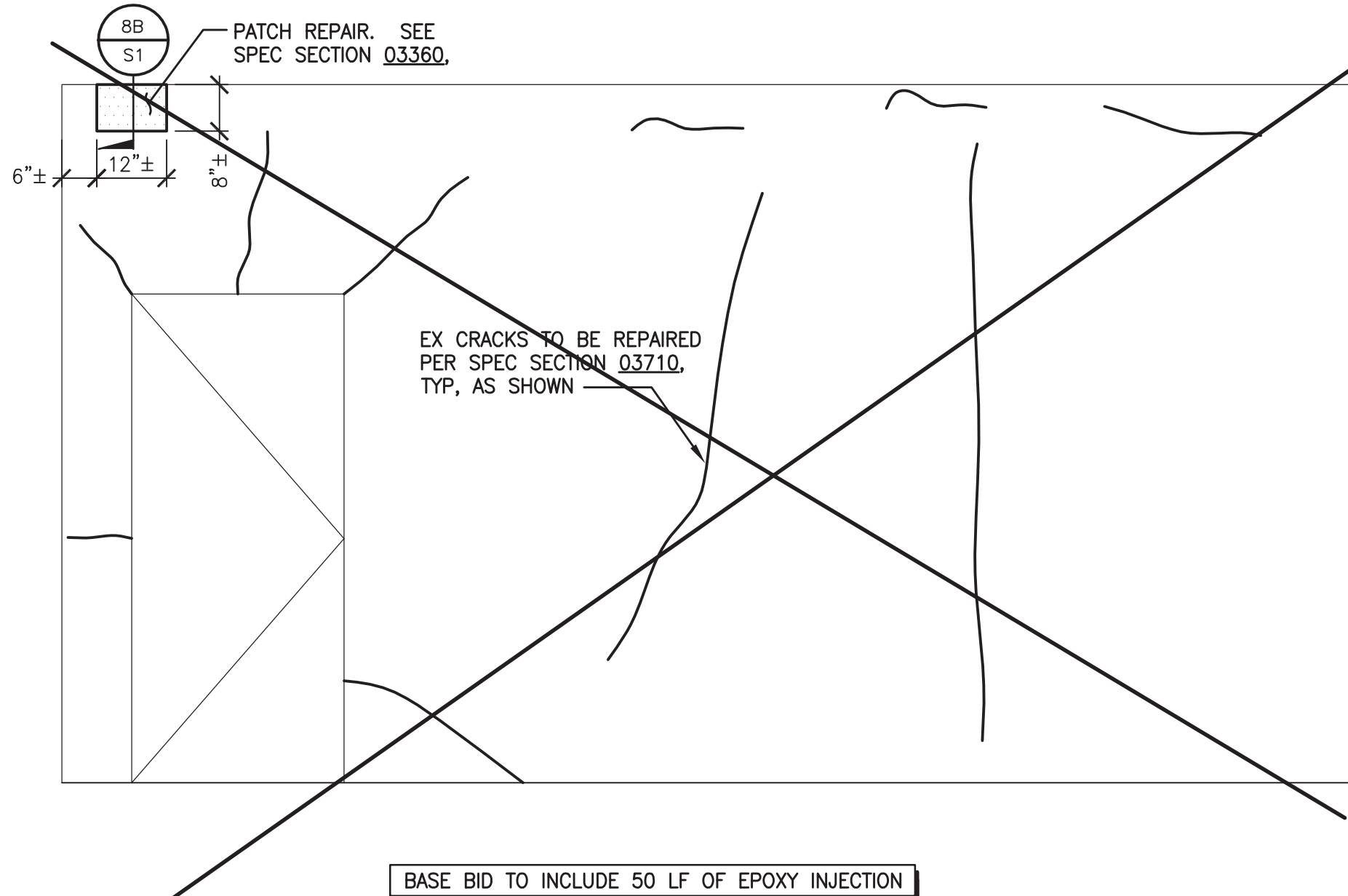


CITY OF MESA ENGINEERING DEPARTMENT	
PSTF EXISTING BURN BUILDING 3260 NORTH 40TH STREET	
WALL ELEVATIONS	S5
SHEET 6 OF 8	CATALOG NUMBER: A-176939

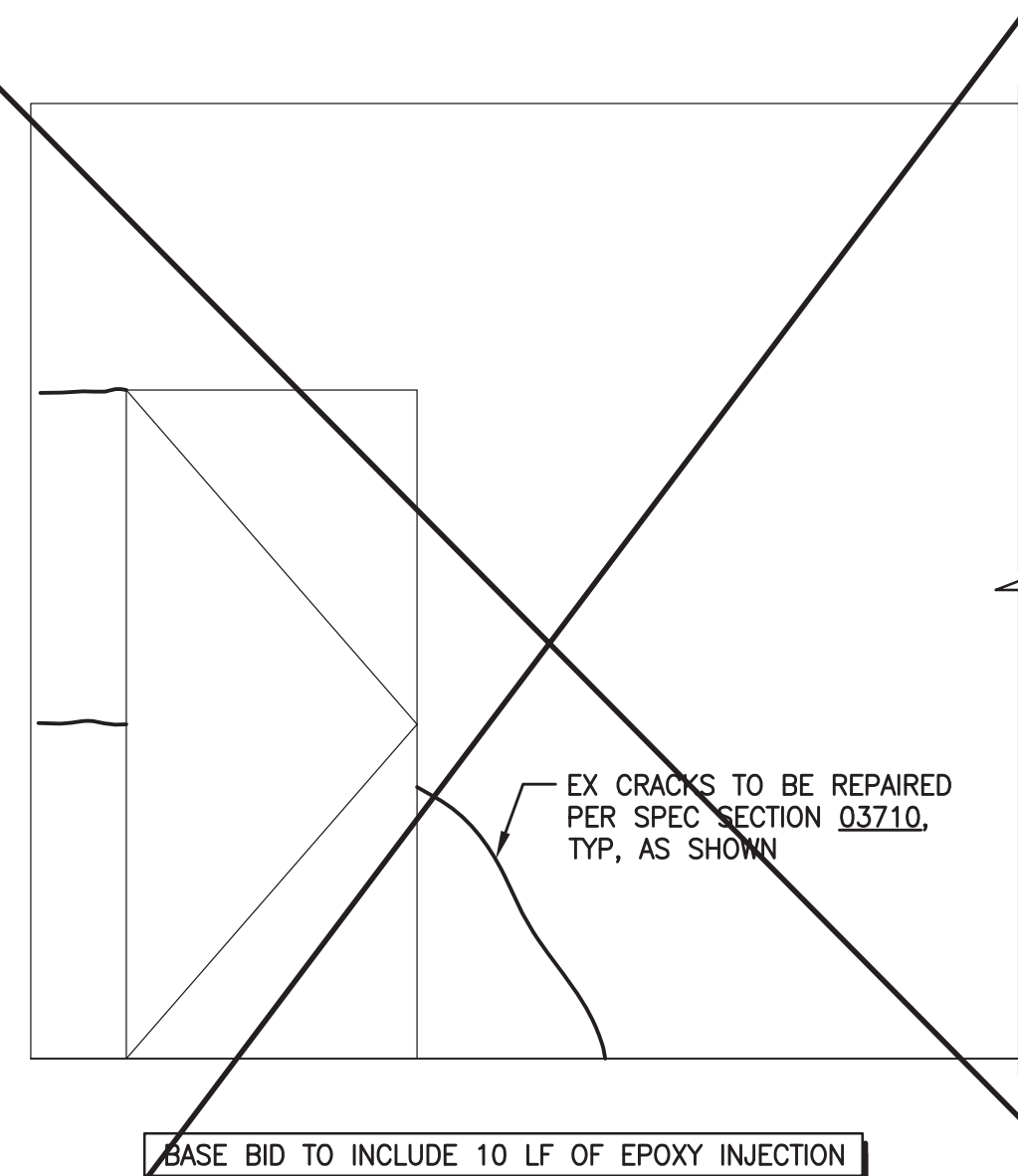
DATE: 7/8/15 I:\CP0096 PUBLIC SAFETY TRAINING FACILITY BURN ROOM\CP0096-1 PSTF EX BURN BLDG STRUCTURAL REPAIRS\DESIGN\CADD FILES\PLANS\ELEVS\DWG



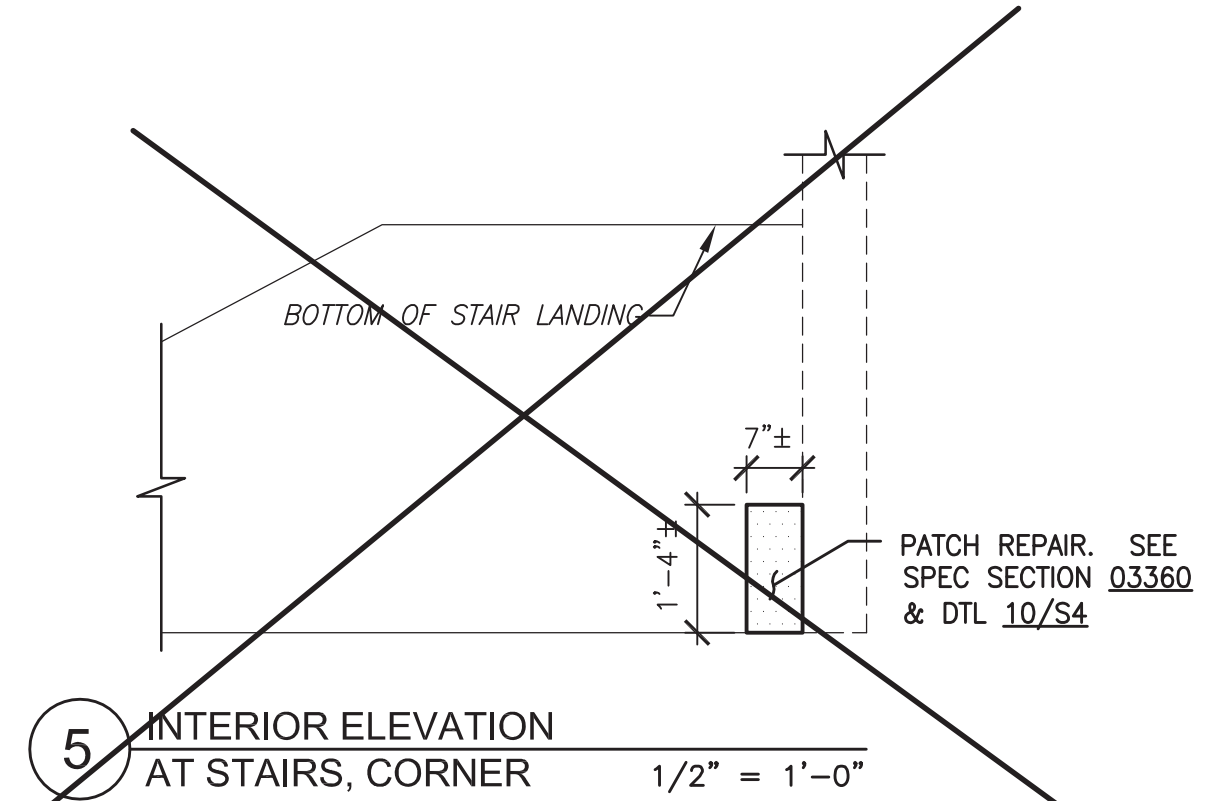
1 EAST INTERIOR ELEVATION
AT SECOND FLOOR, LOOKING EAST 1/2" = 1'-0"



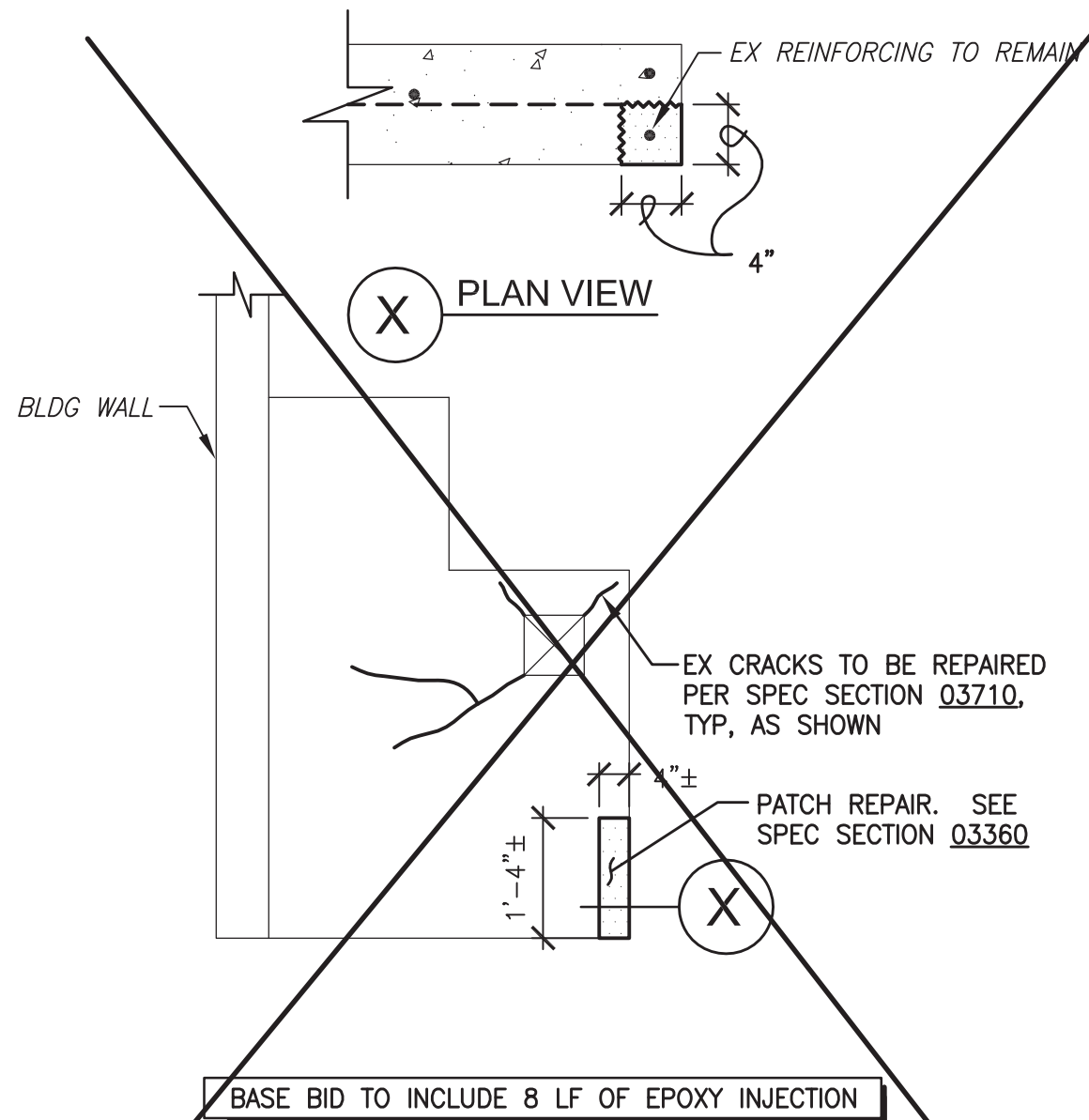
2 WEST INTERIOR ELEVATION
AT MAZE ROOM, LOOKING WEST 1/2" = 1'-0"



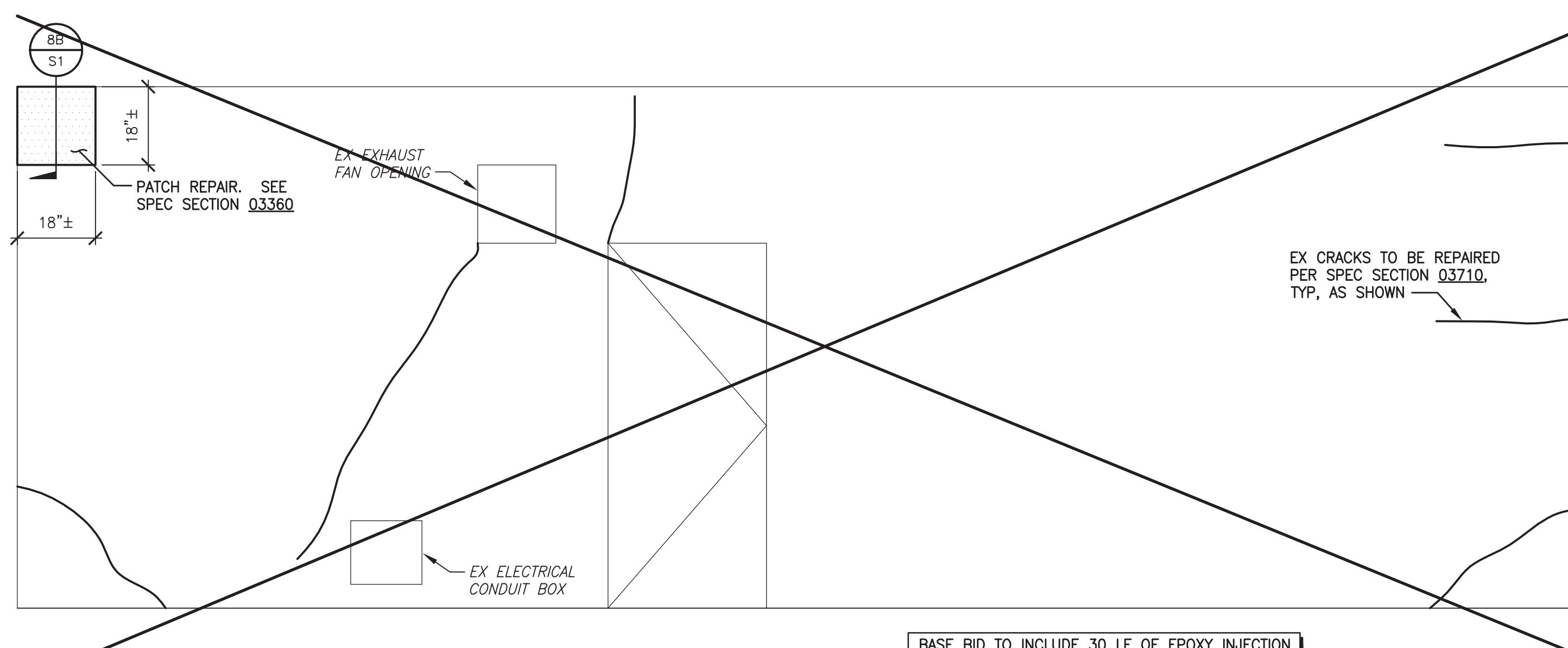
4 NORTH INTERIOR ELEVATION
AT MAZE ROOM, LOOKING NORTH 1/2" = 1'-0"



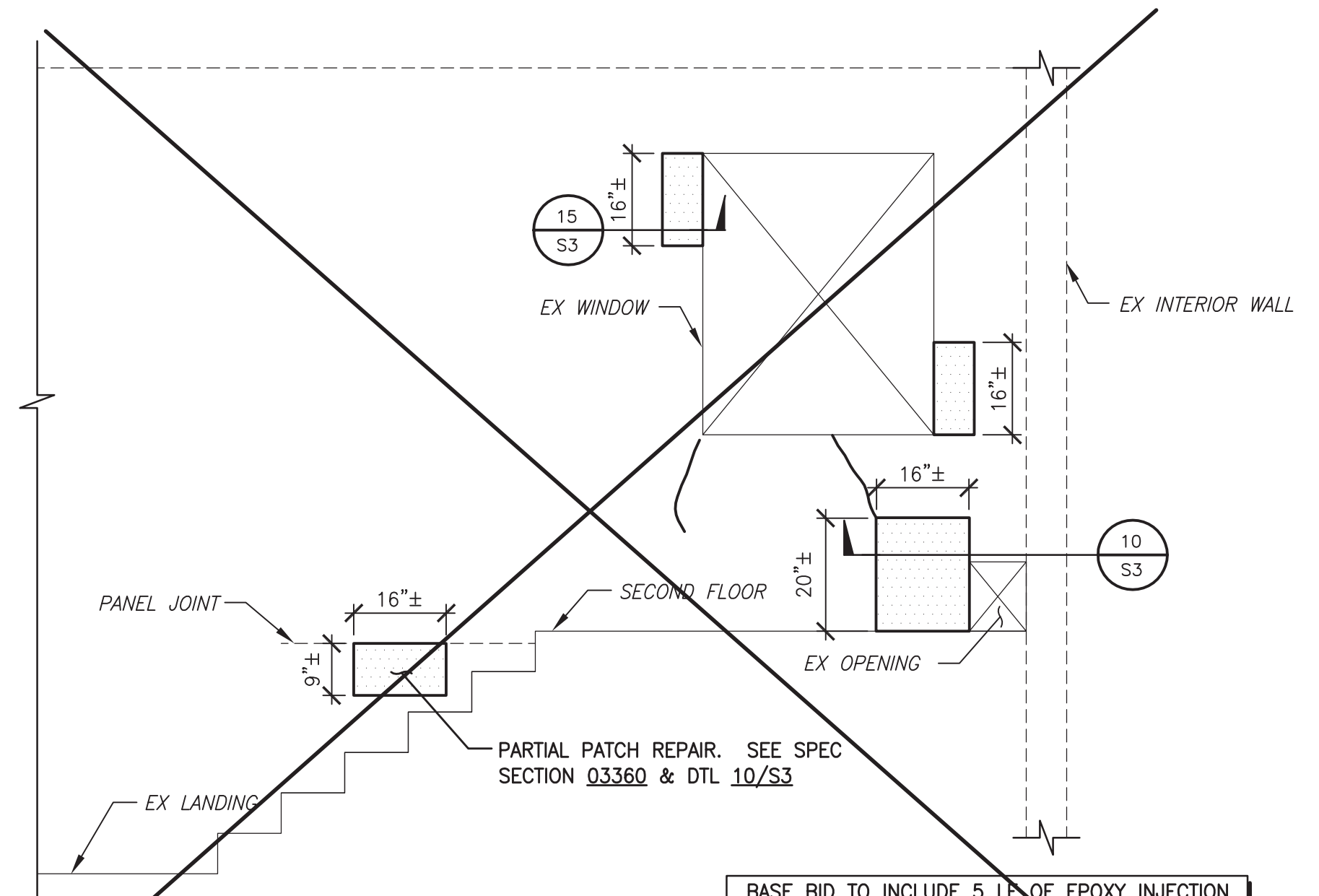
5 INTERIOR ELEVATION
AT STAIRS, CORNER 1/2" = 1'-0"



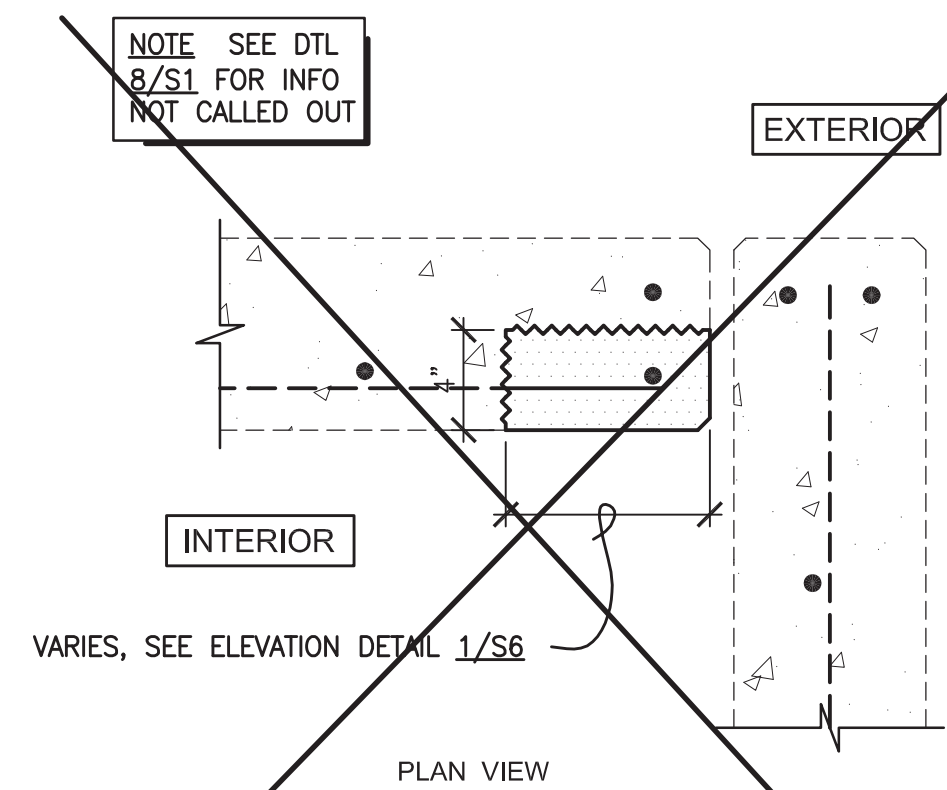
10 EXTERIOR PANEL ELEVATION
GROUND FLOOR, LOOKING SOUTH 1/2" = 1'-0"



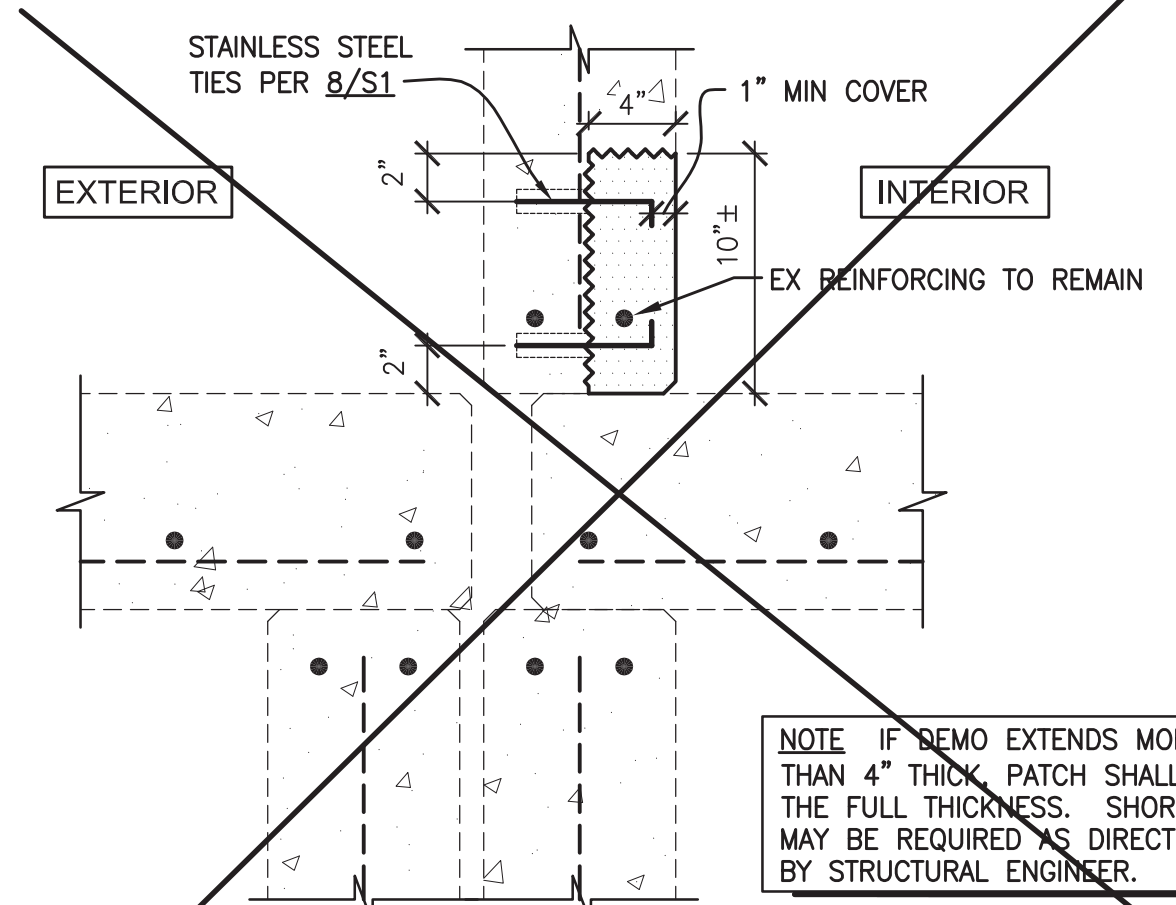
12 SOUTH INTERIOR ELEVATION
AT MAZE ROOM, LOOKING SOUTH 1/2" = 1'-0"




15 INTERIOR ELEVATION
LOOKING NORTH 1/2" = 1'-0"



18 REPAIR AT SECOND FLOOR CORNER
1 1/2" = 1'-0"



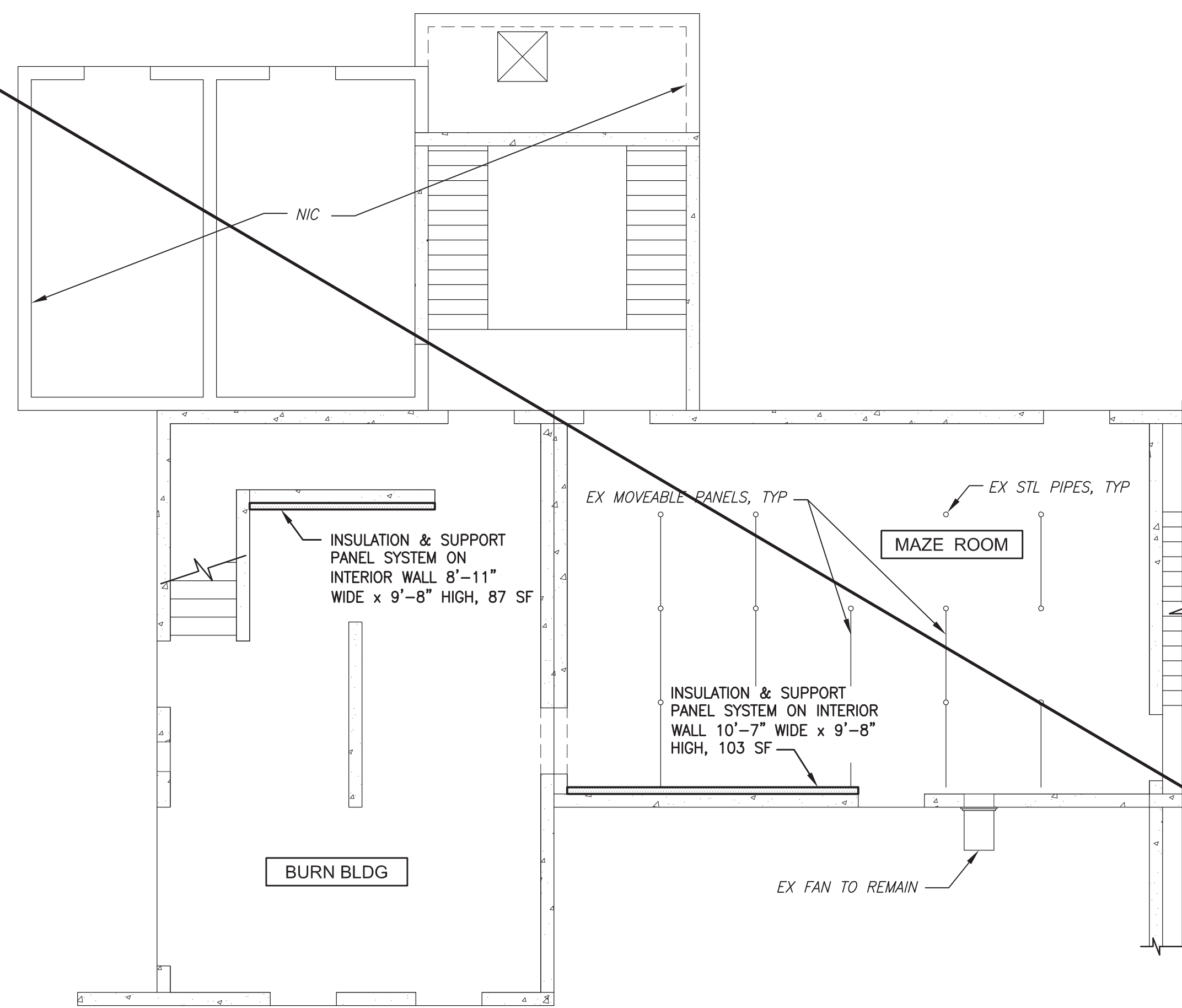
19 EXISTING BOTTOM OF WALL REPAIR
1 1/2" = 1'-0"

	CITY OF MESA ENGINEERING DEPARTMENT	
	PSTF EXISTING BURN BUILDING 3260 NORTH 40TH STREET	
	WALL ELEVATIONS & DETAILS	DRAWING S6
	SHEET 7 OF 8	CATALOG NUMBER: A-176940

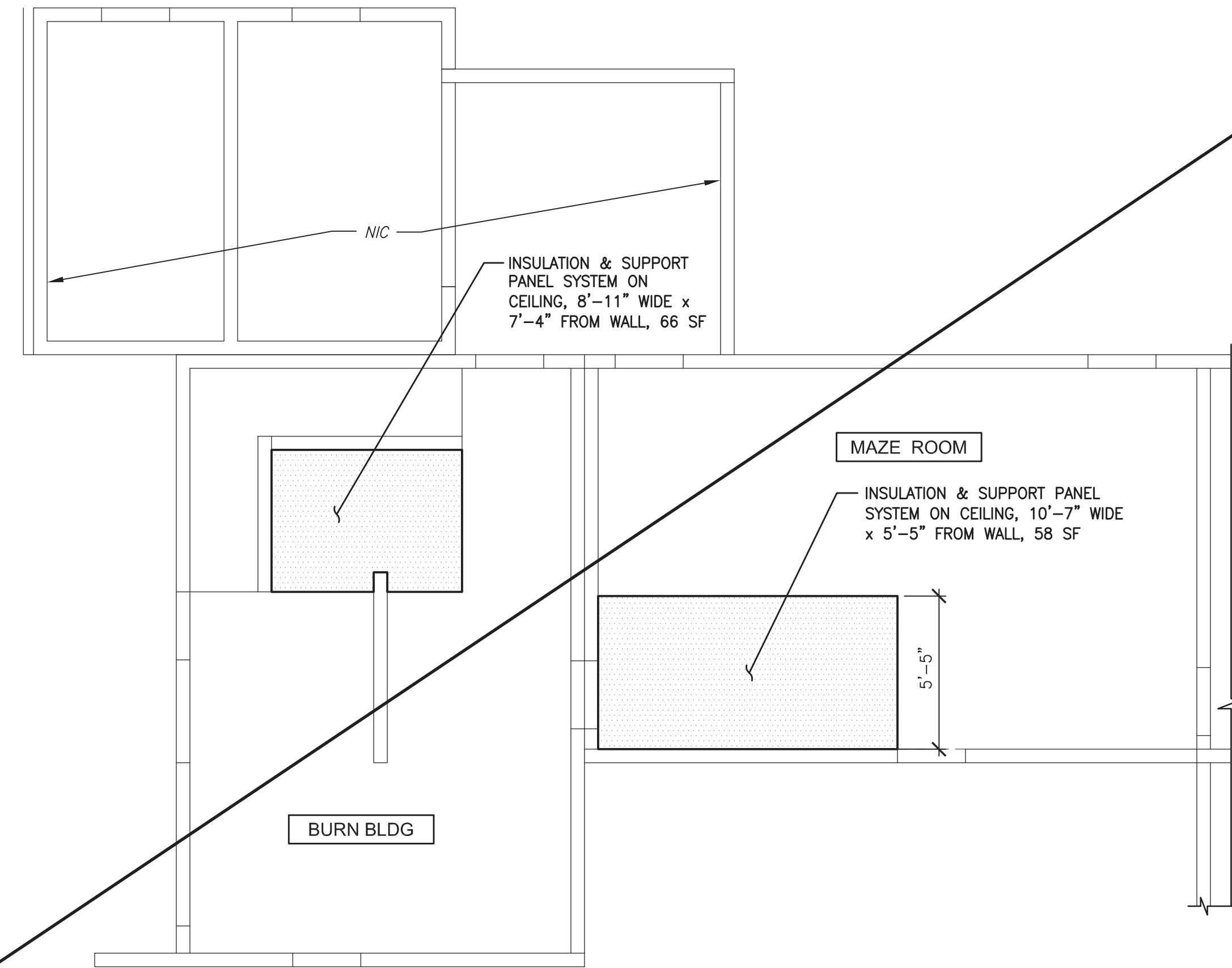
DRAWN BY: ESORENSEN
ENGINEER: S. SAFI
APPROVED BY: S. GANSTROM

ACTIVITY: 1675
PROJ. NO.: CP0096-1

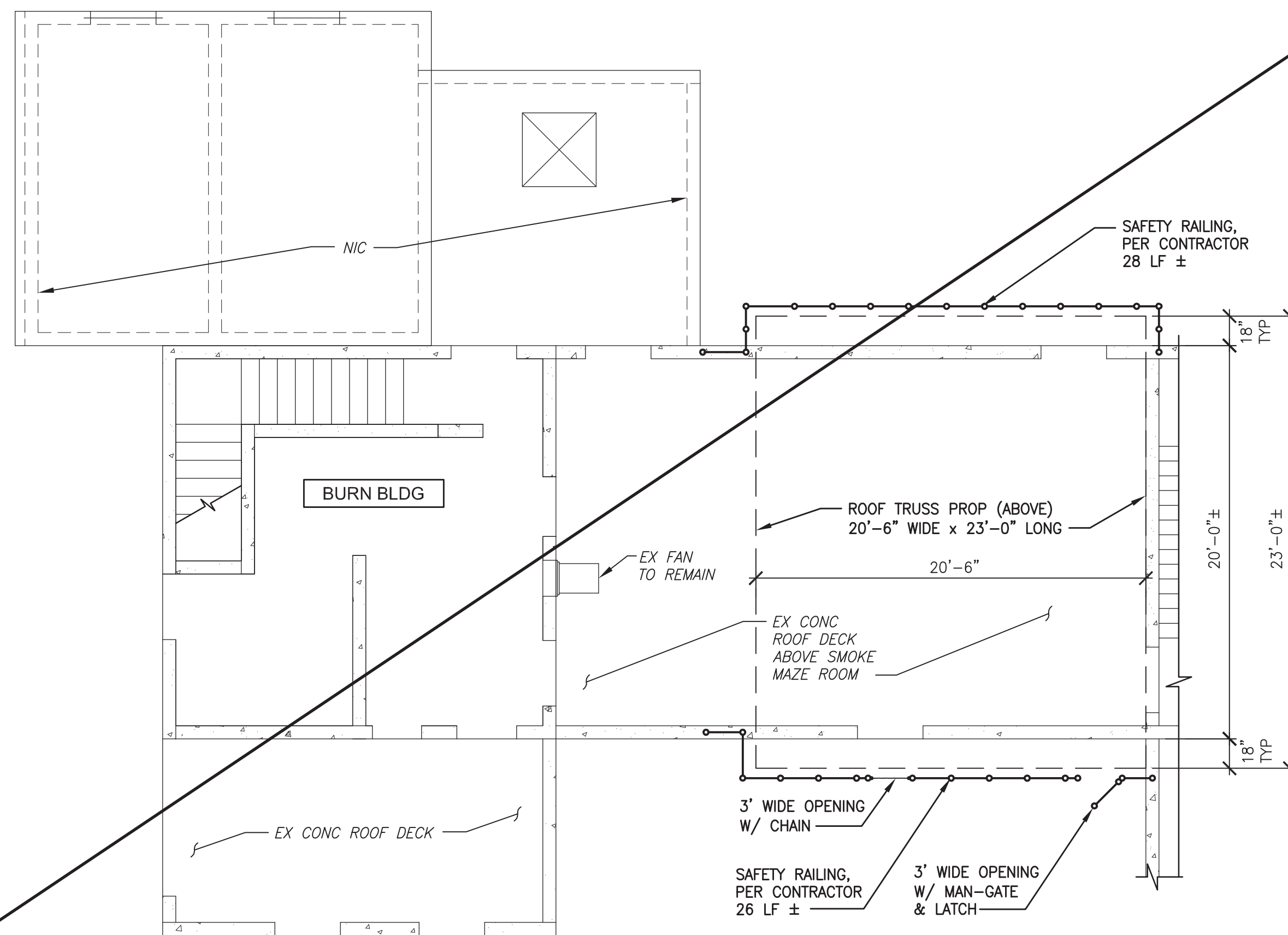
DATE: 7/8/15 I:\CP0096 PUBLIC SAFETY TRAINING FACILITY BURN ROOM\CP0096-1 PSTF EX BURN BLDG STRUCTURAL REPAIRS\DESIGN\CADD FILES\PLANS\CP0096-1 08 S7 INSUL & RAIL.DWG



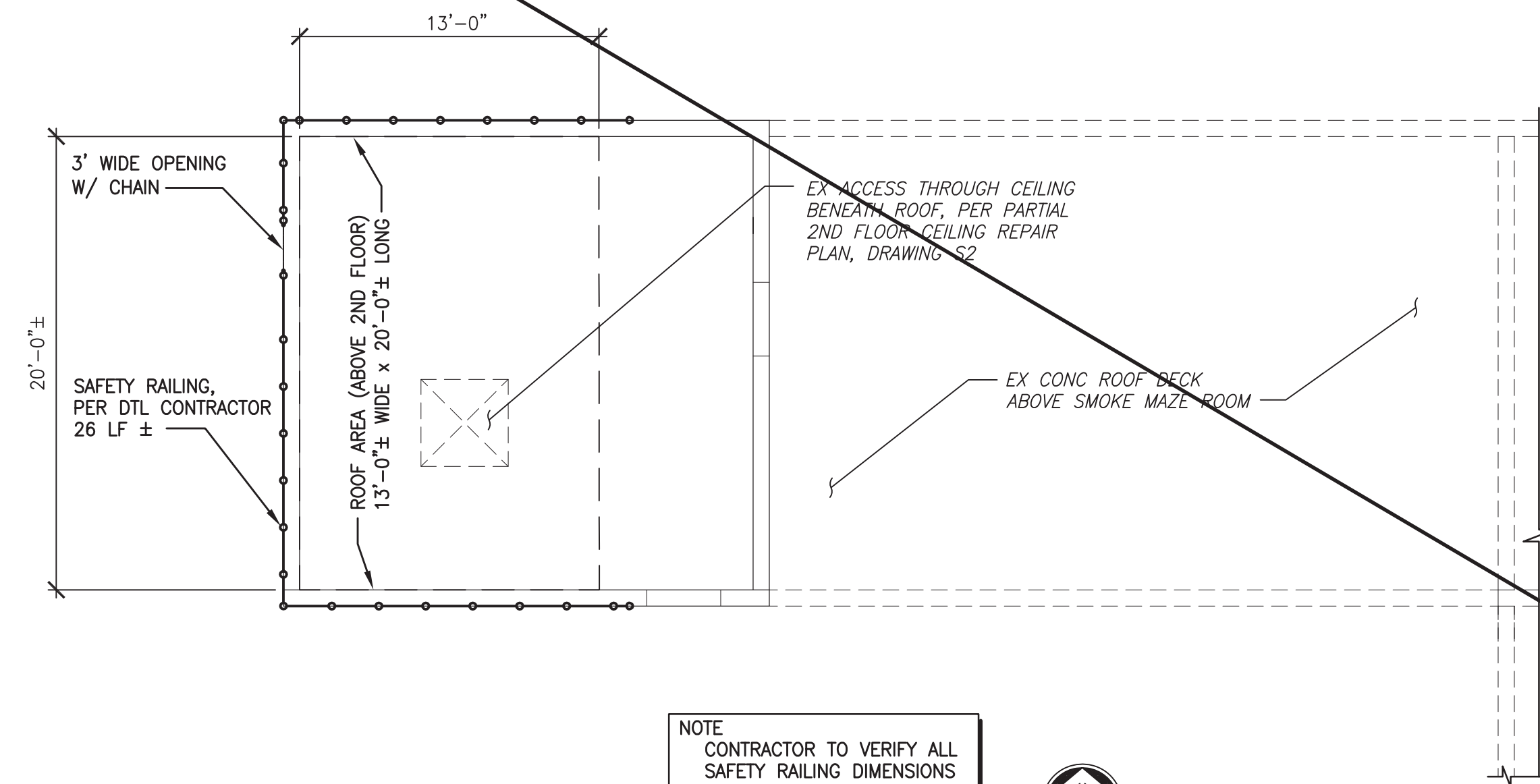
INSULATION PANELING PLAN FOR FIRST FLOOR WALLS
3/16" = 1'-0"



INSULATION PANELING PLAN FOR FIRST FLOOR CEILING
3/16" = 1'-0"



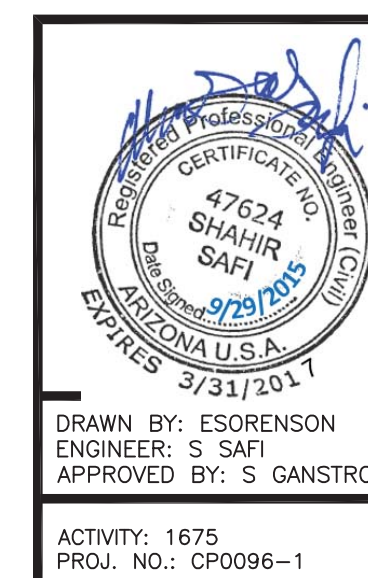
SAFETY RAILING PLAN FOR ROOF DECK FROM SECOND FLOOR
3/16" = 1'-0"



SAFETY RAILING PLAN FOR SECOND FLOOR ROOF
3/16" = 1'-0"



NOTE
CONTRACTOR TO VERIFY ALL
SAFETY RAILING DIMENSIONS



CITY OF MESA ENGINEERING DEPARTMENT	
PSTF EXISTING BURN BUILDING 3260 NORTH 40TH STREET	
INSULATION PANEL SUPPORT SYSTEM & SAFETY RAILING PLANS	DRAWING S7
SHEET 8 OF 8	CATALOG NUMBER: A-176941

DRAWN BY: ESORENSEN
ENGINEER: S. SAFI
APPROVED BY: S. GANSTROM

ACTIVITY: 1675
PROJ. NO.: CP0096-1